

# THE MARINE CORPS GAZETTE



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## **The Marine Corps Association**

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# *The* **MARINE CORPS GAZETTE**

Colonel Louis McC. Little, U. S. Marine Corps, Editor

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*Patrol of Marines and Nicaraguan Volunteers Leaving Ocotal*



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## SOME THOUGHTS ON SERVICE SCHOOLS

By COLONEL J. C. BRECKINRIDGE, U. S. M. C.,

*Commanding Marine Corps Schools*

THE MARINE CORPS SCHOOLS opened their doors on September 6, 1929, with fifty-four officers attending the Basic Class in Philadelphia, and seventeen taking the Company Officers' Course and seventeen the Field Officers' Course in Quantico. These circumstances give rise to some ruminations on the subject of schools, and methods of study.

There are a good many schools in the services and they instruct in a vast diversity of subjects. It is impossible for any officer to attend them all, and there is probably considerable overlap in their courses. The question here is: What schools should a Marine Officer attend? An answer seems apparent. He should attend those that instruct in subjects embraced by his profession, because he will thus round out his usefulness. Another question now thrusts itself to the front: Are there any subjects that a Marine Officer is not called upon to face during his varied career? Yet he cannot prepare for them all. Here the ruminations become confused.

It is easy to theorize, but where is the line that divides generalization from specialization? Service schools look to each other for inspiration, and maybe for some guidance. They are not in competition yet, in a way, they seem to follow each other. They seem to tumble into the same pitfalls, and for the same reasons. Perhaps we need to raise our eyes from the routine of military life, circumstance, habit, and curricula. We seem to be circumscribed, and "bound upon the wheel." Our work is important but seems to lack inspiration. In comparing one school with another there is a sameness that is monotonous, and the differences consist chiefly in minutiae and their multiplication.

All educational efforts are of two phases which, although distinct, are but indistinctly divided. One cannot draw a line and say the division is *here*. The first phase is arbitrary and not open to difference of opinion. A child is taught the alphabet in that way. He has to accept certain marks as having arbitrary names, and in the order in which they are presented, from A to Z.

There is no initiative until the construction of words begins, when the child learns to spell sounds with which he is familiar. From that point on, through language, philology, and literature, there is no limit to his creative field. The operation of a piece of machinery is arbitrary. To open or close valves, throttles, or contacts, must result in known actions of moving parts. But the *design* of that machine was original and creative. To operate calls for intelligence; to design calls for originality. The operator can imitate the actions of another, but the designer must create out of his own inventive genius. Where in the scheme of education shall we draw a line, and say to the student: Up to this place you must accept what you are told, but beyond here you must think for yourself!

There is no progress without criticism. Every improvement is born of criticism that resulted in a discard. The process seems to run in this wise: Curiosity leads to investigation, which opens discussion, which gives rise to opinion, which breeds criticism, which results in improvement. Therefore we must cultivate curiosity, encourage investigation, stimulate discussion, and inspire criticism that will result in improvement. All of this bespeaks a wide freedom in thought and an acute divergence from the arbitrary. The military mind should not accept things for no better reason than that they are so stated. Military reasoning should be analytical and critical above everything, because military problems are not susceptible of academic proof; and that which has been proven by force of arms in one place has been disproven in another. There is no formula for waging war or fighting battles; to apply a rule is to invite, or demand, disaster. No matter what precedents there may be for what appears to be similar situations we always need to apply original analysis to every situation. Napoleon's Russian campaign in 1812, and his actions together with those of his opponent (Kutusoff) are a revelation of the inapplicability of rules. The campaigns of Suvoroff (1730-1800) indicate that only the violation of rules, or what we call "Principles of War," succeeds. Suvoroff was an intense individualist who possessed a mind that was filled with unbelief and caustic criticism. Apparently he was ignorant of all principles of war, but he knew how to analyze every situation for what it was worth, and to apply the winning solution thereto. Such a man had never been indoctrinated by an arbitrary school of thought.

Although some arbitrary teaching is necessary for beginners, and along certain mechanical channels, it should be increasingly weaned away from at the earliest period. As classes advance in scope and breadth, being designed for men of experience and maturity, they should become more and more open forums for discussion and dissection of special episodes. The following paragraph is borrowed from a pamphlet issued by the University of Wisconsin. After some words I have inserted others in brackets to show, by a little paraphrasing, how applicable their theory is to the study of military problems:

"The course of study will frankly rest upon the principle of a study of situations rather than a study of subjects. That is to say, instead of studying the various sciences, economics, history, literature, psychology, sociology, and the like, as if they were separate and distinct things, and then later—probably after graduation—trying to bring the separate knowledge of these separate subjects to bear upon the task of understanding and of living and working (and making war) intelligently in a complicated civilization, the students of the EXPERIMENTAL COLLEGE, with the council and cooperation of their teachers, will, figuratively speaking, put coherent episodes of civilization (war) upon the table, dissect them, see what forces animated them, what motives moved them, what factors—racial, political, social, economic, religious, philosophical, or scientific—were at work in them. In this process of dissecting various coherent episodes of civilization (war), the students, with the council and cooperation of teachers with specialized knowledge, will reach out into all the separate fields of subject matter usually taught in college (military schools and war colleges) for whatever light they need to have thrown upon the episode in question in order to understand it." "To put the matter more briefly: Instead of studying separate subjects, more or less for their own sake, in the hope that the knowledge and discipline gained in their study may be useful later in the task of understanding the situations they may face, the students of the EXPERIMENTAL COLLEGE will frankly begin at the other end, begin trying to understand typical situations and searching for and mastering subject matter in various fields if and when they need it in their adventure in understanding."

In other words, these students are not taught to learn what is handed to them, and to accept it because it is handed to them in a college, and to mold their minds upon precedent and chronology. They are taught to dissect, to analyze, and to think. They are taught how to develop their inherent intelligence and to use their minds for *original thinking*. Napoleon stopped thinking during his Russian campaign in 1812. He was applying to a new country and a new race of people the same principles of war that he had used with terrible success in western Europe. His opponent (Kutusoff) was not a man of any ability. The situation was as new to him as it was to Napoleon, and whatever thinking he did was *backwards* even granting that it was highly original. The point is, that small as Kutusoff's reputation was, and great as Napoleon's was, Kutusoff extinguished the Grand Army, and if he had had a little less sense he would have captured Napoleon himself. Kutusoff probably knew nothing of principles of war, and little enough about precedents. He was confronted with his one great situation and he solved it with clumsy originality. Napoleon knew all about the people, country, and military adroitness of western Europe. He was supreme among those whom he knew how to conquer. But he knew nothing about, and failed to dissect and analyze, the Slav race and its board-flat country that was devoid of roads

and crossed by sluggish streams. It never entered his head that any people would refuse to fight when their land was penetrated by an enemy, or that they would destroy their greatest city rather than defend it, even if they lost and had to surrender it. Blundering originality triumphed over precedent and principles alike.

Striving for originality in thought, teaching the student to analyze a situation rather than to accept a doctrine or a platitude because it is asserted, is being tried out in the University of Wisconsin. This theory was originated by Doctor Alexander Meiklejohn when he was President of Amherst College, and it has been accepted by the University of Wisconsin to the extent of including within itself what is sometimes called "A College within a College," but is more usually referred to as the "EXPERIMENTAL COLLEGE." The subject has interested me so greatly, and I believe it is so appropriate for military students, especially in their more advanced researches, that I have been at some pains to keep abreast with its development, and I will quote from the pamphlets issued enough to give the reader a comprehensive outline of the ambitions and scope of this departure in liberal education. In order to clarify the text, or to make it more appropriate for military application, I have inserted certain words in brackets; wherever these appear they are my own and do not belong in the original.

"It has often been remarked that while our colleges and Universities (service schools and War Colleges) succeed admirably in producing men who think clearly, objectively, and creatively within the boundaries of their particular specialties, scientific or otherwise, our colleges and universities (service schools and war colleges) do not produce, with an equally consistent success, men who think clearly, objectively, and creatively outside their specialties. But men's specialties and professions must sink their roots in the whole of the social (military) order, and men must adjust themselves to the complicated whole of their civilization (military profession), if they are to practice their specialties with maximum effectiveness, to say nothing of the duty and satisfaction of being clear-minded and creative-minded citizens (officers)—citizens (officers) able to think and act without prejudice and with perspective.

"The students of the EXPERIMENTAL COLLEGE, for a large part of their time at any rate, will be actually practicing the task of thinking clearly, objectively, and creatively about the complicated whole of successive episodes of civilization (war). If this practice in the art or science of understanding a civilization (war) or a social order bears the fruit its proposers are aiming at, we may expect it to result in educated men who will not only better understand the life (military profession) of their time, but who will be better specialists as well.

#### "THE METHOD OF STUDY AND TEACHING."

"Here, again, as in the case of the outline of the course, no hard-and-fast



unchangeable set of methods will be imposed upon the students from the first day. (Note: It should be explained that the EXPERIMENTAL COLLEGE is now in its second year, and is, therefore, still feeling its way.)

"This much, however, may now be said with certainty—in the EXPERIMENTAL COLLEGE, it will not be so much matter of teachers teaching students as a matter of teachers and students studying together. The objective is a college in which teachers will teach less and less and students will study more and more. (Note: I do not think this means that students will apply themselves through more hours of study, but that they will research and originate with greater freedom.) The teachers will not consider the authoritative handing down of knowledge to the students as their primary function; they will look upon themselves as provokers and guides in the learning process. It will be a case of a group of intelligent men, each with a fund of specialized knowledge, joining with a group of students in a common effort to understand the problems of living and of learning (of solving military problems) as these problems may be seen in the episodes of civilization (wars and their causes.) The teacher, from the point of view of the idea animating the EXPERIMENTAL COLLEGE, must not be a crutch upon which the student may lean; he must be a challenge the student must answer. (Note: Read that sentence again. To me it means that the teacher must jolt a student out of his rut of thought, in which he complaisantly accepts what he is told, or what he reads. The student must be spurred to arrive at his own conclusions, and for his own reasons.) This is what is meant, at least part of what is meant, by the phrase 'a community of learning' that has appeared again and again as a sort of refrain through the discussions of the EXPERIMENTAL COLLEGE."

Referring to examinations we learn they ". . . will be devised to test the ability and industry of the students. Here, again, every effort will be made to improve upon existing methods of examination." This, too, seems to be an important step in advance. It means, to me, that the orthodox method of repeating what has been gleaned from a book is headed for the discard, and that ability and industry will be measured by *the depth and width* of a student's *researches*; that his ability and industry will be demonstrated by his grasp of the subject matter *irrespective* of agreement or *disagreement*, or his adroitness in repetition. The higher the military education of an officer progresses the more important this becomes. Now to quote President Glenn Frank of the University of Wisconsin.

*"The Educational Aims Of The Experimental College.*

"As President of the University, interested in the maximum educational effectiveness of all of its colleges, liberal and technical alike, I want to express certain purely personal expectations respecting the EXPERIMENTAL COLLEGE. I stress the personal character of this closing statement because

I do not want to commit the teachers of the EXPERIMENTAL COLLEGE or teachers elsewhere in the University to all of the implications respecting educational aims and methods that might be read into it.

"The major riddle of liberal (military) education, as I see it, grows out of the two main developments that have marked American education during the last fifty years, viz:

"First, intensive specialization.

"Second, extensive freedom of choice under the elective system.

"Both of these developments have been highly useful. Both were inevitable. The rising tide of new knowledge, flowing into our universities faster than educators could possibly turn it into the well cut channels of any coherent educational scheme or curriculum, made both intensive specialization and extensive freedom of election not only inevitable but the easiest way of handling the inrush of new knowledge.

"In these last fifty years of the era of specialization and freedom, however, we have lost or have had to struggle to keep from losing coherence and perspective out of our educational results. We have seen these two highly important principles of specialization and freedom resulting in two bad by-products, viz:

"First, suicidal specialization.

"Second, suicidal smattering.

"Suicidal specialization has given us the graduate (Officer) who knows everything about some one thing, but who knows so little about other things and about the social (military) order in which he must practice his specialism that he is unable to keep his specialism in perspective.

"Suicidal smattering has given us the graduate (officer) who has picked and chosen here and there and yonder, under the license of the elective system, until he knows a little about a great many things, but who does not know enough about any one thing to bring himself and his knowledge to effective focus.

"It is generally agreed that a man can be neither a good citizen (officer) nor a great specialist if he falls victim either to suicidal specialization or to suicidal smattering."

"I have confidence that the experience of the EXPERIMENTAL COLLEGE will shed needed light on the problem of avoiding both the perversion of specialization that makes us narrow minded and the perversion of freedom that makes us scatter-brained. The time is probably past for the organization of all knowledge into any single curriculum. Our universities cannot produce human encyclopedias. But I suspect that it is possible to bring into liberal education that breadth of knowledge and sense of the relation of things we are in definite danger of losing. And I suspect that we can do this, not by



making artificial synopsis of all (military) knowledge, but by setting students at the task of trying to unravel and to understand typical human (military) situations by searching out and bringing to bear upon such situations whatever knowledge may be needed for their understanding. The educational possibility of this method is one of the things we shall discover as the EXPERIMENTAL COLLEGE proceeds."

"But all this has to do with the end results of the work of the EXPERIMENTAL COLLEGE. And these end results will depend, not so much upon the mechanical adjustments of the subject matter, as upon *the kind of activity that gets under way in the minds of the students.* (My italics.)

"I have confidence that the methods of study and teaching to be employed in the EXPERIMENTAL COLLEGE will awaken in its students that rarest of rare things in colleges—a genuinely critical spirit, a real sense of evidence, and a sustained suspicion of false deductions."

"I have confidence that the methods of study and teaching to be employed in the EXPERIMENTAL COLLEGE will work against the passive acceptance of information and ideas by students from teachers, and will make for independence, initiative, and originality, and that with the development of perspective, the critical spirit, and initiative will come a genuine zest for thinking, a lively curiosity for human affairs (broad military affairs and their causes) that will remain with students throughout their lives, giving to them a living elasticity and effectiveness that will keep them eager learners after their college (student) days are over."

The paper from which these quotations are made has been on my desk for about a year, and I have read and pondered it all that time. It does not outline a technique for teaching and studying. The effort that it describes is still experimental. It is a philosophy of thought, a habit of, and in, thinking. It is a method of approach for any non-technical subject upon which enlightenment is desired. And it is distinctly for advanced education and use. At the same time it must infiltrate into the minds of those who might adopt it long before they reach the period of broad envisagement. The fact that it has been adopted (experimentally) by the University of Wisconsin alone is proof that it is not yet popular with mature orthodox thinking. There is the difficulty of inappreciation. Those whose minds are formed are naturally rather unsympathetic to the introduction of a doctrine with which they are unacquainted and, *because* their minds are formed, they fail to comprehend the full scope of an innovation.

Military schools conform too closely to the ritual of technique and events. The arbitrary method should be practically relinquished with the junior classes that teach the inelastic mechanics of things and subjects. Communications, ordnance, administrative paper work, the mechanics of gunnery, field engineering, elements of law, and kindred subjects all belong in the arbitrary

category, at least in their earlier stages and before a high degree of specialization ushers them into the liberal field of inventive effort that seeks for improvement. Drill regulations are practically welded in the arbitrary class. But *tactics* have little business there, and *strategy* should not even be approached until the mind is freed of the earlier details that were once so all-important. The words "Command and Staff" convey a broader meaning (or should convey it) than is usually inferred. The conception is of an endless collection of annexes composed by men who are usually specialists in certain lines, who try to justify their offices and positions (who can blame them for that?), and who add to the mass of reports, "studies," and estimates already compiled. Some of these things are necessary but for the most part they are cumbersome nonsense. They conform to a school ritual of what should be irrespective of what is needed in a particular case. Officers become adept in the ritual, and can turn out the required number of papers, but their originality, initiative, independence of thought and action and of official prerogative, have been so scholastically smothered and encroached upon that they lack perspective. Instead of measuring their work by brevity plus clarity plus decisiveness, they measure it by volume, under an impression that mass means strength.

These are conditions as they seem to be, or to have been, among the service schools in general. It is the aim of the Marine Corps Schools to avoid this situation. Our work is such that we cannot get as deeply in the rut of habit as any who have less diversity in their daily and yearly activities. Nevertheless, we need to guard against the complaisant acceptance of theories for no better reason than that they are used somewhere else, or are taught in a certain text, or were enunciated by a recognized authority. As our problems are as unique as they are unexpected their solutions cannot be inelastically anticipated. We need officers who are trained to reason briefly, clearly, decisively, and sanely. Above everything they must have complete faith in their own ability to master whatever they may be confronted with. That calls for confidence both up and down the scale of rank and responsibility. To meet these requirements, and to develop this type of officer, is the ambition of the Marine Corps Schools.

Our educational system is divided into four separate but interlocking schools. The Basic Course in Philadelphia is necessarily the most arbitrary in its teachings. The Company Officers' Course in Quantico extends the horizon of its students beyond the arbitrary limits of mechanical things and actions. And the Field Officers' Course finally removes the limits and restrictions to originality, and teaches its students to apply *themselves* and their own innate abilities to every situation that demands **an analysis and a decision**. This is what our officers, and only to a lesser degree our men, have to do in the practice of their profession. Then there is the Correspondence School that supplements the others, and that is surprisingly well patronized by officers (and men too) who wish to develop themselves in special ways.

Another school is contemplated and being prepared for. It will be for planning, and special staff training along executive lines. This work requires nothing but initiative and the application of original thought to the solution of every situation and condition. There will be no directives to begin with, although there will be an outline of suggestions. If every *case*, or situation, is approached as a complete whole and analyzed by men who are trained to think objectively and creatively, and without regard for ritual, precedent, or form of procedure, the resulting solution, or plan, will be an original work that is singularly appropriate for its purpose. It will also be clear, brief, and workable. It is in this work that the philosophy of the EXPERIMENTAL COLLEGE seems to be exceptionably desirable, because out of it will be evolved a *habit of thinking and analyzing* (but not of fulfilling a ritual) that will be suitable to every situation encountered in military life.

In order to epitomize all that is desirable in a military decision of high importance, I will refer to that reached by the Commanders-in-Chief of Germany, Austria-Hungary, and Bulgaria when, in anticipation of Roumania entering the World War on the side of the Allies, they met in conference at Pless on July 28, 1918. The quotation is from Field Marshal von Hindenburg's book—"Out of My Life," and is a free translation from the original German.

"If Roumania joins the Entente the most rapid advance in the greatest possible strength, to keep the war certainly from Bulgarian soil, and as far as possible from Austria-Hungary; and invade Roumania. Therefore:

- "(a) Demonstrations by German and Austrian troops from the north, for the purpose of immobilizing strong Roumanian forces;
- "(b) Advance of Bulgarian forces from the Dobruja frontier against the Danube line from Silistra and Tutrakan, to protect the right flank of the main body.
- "(c) Readiness of the main body to cross the Donau at Nikopol for the purpose of threatening Bukarest."

That was all! No annexes, and no instructions about "how to do it!" General von Makensen probably had to enter into details in the allocation of troop assignments and provision therefor. But what he did, and the speed and thoroughness with which he did it, pursuant to this ideally brief decision, is ample proof that it was quite enough.

## THE ESTIMATE OF THE SITUATION AND ORDER FORM

*By* LIEUT. COMMANDER E. W. BROADBENT, U. S. N.

THE WRITER recently spent two years on duty with the Staff of the Marine Corps Schools, Field Officers' Course, at the Marine Barracks, Quantico, Va. These two years were preceded by a year at the Naval War College in the Junior Course. The work covered in these two courses is largely tactical, in each case pertaining particularly to the specialized services, Naval and Military. In both courses, however, the basis of the work is similar, that is, the problem, or case-method, of instruction is used.

In both the Field Officers' School and the Junior War College Course, the students are early confronted by the necessity of solving problems on paper. Both schools use for this purpose a formal estimate of the situation, and for the orders resulting therefrom, one or more standard order forms. The estimate and order forms used at Quantico are the standard U. S. Army forms. Those used at the War College are the standard U. S. Navy forms.

As might be expected, there are wide differences between the Army and the Navy forms, particularly for the issuing of orders. But it was found that other differences existed, such as in the interpretation of words, in the general manner of handling situations, in the definition of principles and their nomenclature. For example, a totally different understanding of the military terms "objective" and "mission" was found to exist. Subordinates in Army practice are given much less initiative for action than in Naval practice. The Navy's "principle of superiority" is termed by the Army and the Marine Corps the "principle of mass", and a somewhat different interpretation is placed upon it.

While little confusion is likely to arise from such differences in methods between the Army and the Navy, the same is not true as regards the Navy and the Marine Corps. The close cooperation that must exist between the Marine Corps and the Navy in planning and executing joint operations under the Commander-in-Chief of the Fleet demands a mutual understanding, a common tongue.

In an effort to clarify the situation it was decided to introduce into the Field Officers' Course a brief discussion of Naval Estimate form including a type case of its application to a minor landing operation. The student officers were then permitted to use either the Naval estimate form or the Army estimate form for their solution of a subsequent problem. No attempt was made to apply the Naval order form to military tactical situations because of obvious inadequacies. As was expected, the student officers encountered difficulties due to the unaccustomed form and differences in word-meanings.



An opinion prevailed that neither the Navy or Army estimate form was the best that could be devised for such elaborate estimates as are required for a joint Marine Corps-Navy operation. No appropriate form was developed.

The question of the form to be taken by the formal estimate of a situation is of less importance than that the analysis be complete and the conclusions (decisions) sound. Correct thinking, however, must rest upon a proper and generally understood definition of words and their application. This point was emphasized at the very beginning of the discussion of the Navy's estimate form at Quantico when the subject of derivation of the mission was taken up. In Naval phraseology, a "mission", when properly stated, consists of two parts, the TASK plus the PURPOSE. As is well known, a mission may be taken directly from orders, or it may be derived by study of the situation confronting the Commander.

This subject of the derivation of the mission leads us into the very heart of the matter, and introduces the Navy order form. The body of this order form consists of five paragraphs, as follows:

Paragraph I—Information of own and enemy forces.

Paragraph II—The action to be taken by the force *as a whole* (The Force Commander's "decision").

Paragraph III—Includes a group of lettered sub-paragraphs, one for each group of forces in the task organization. Each sub-paragraph tells for its respective task-group:—

1. What to do.
2. To what it is to be done.
3. Where.
4. With what.

Paragraph IV—Logistics (In the sense of supplies, fuel, etc.)

Paragraph V—Communications (radio frequencies, etc.) Location of the officer issuing the order.

It should be noted that in no place in the order is any subordinate task force commander told *how* he shall execute the task (what to do) assigned him. The right to prescribe how a task shall be executed is reserved to the senior, but is rarely exercised, and then only when a specific method of execution is essential to the success of the major plan.

To return now to the mission. When a task group commander receives an order in the above form, he consults paragraph III for his TASK and finds his PURPOSE in paragraph II. He then proceeds with his own estimate, and with full knowledge of what his commander expects of him and his fellow unit commanders, he decides upon how he shall execute his mission.

So much for a mission derived from orders. The other form of derivation of the mission from study of a situation not covered by orders may confront any commander whether of a battalion or a division. Suppose that,

during the execution of a task assigned in orders where no "purpose" is expressed, a condition comes up necessitating a radical departure from the task assigned. Action of some sort is mandatory, and the commander on the spot must decide. What is to guide him in reaching his decision so that his action will result in furtherance of his commander's plan? There can be no guide other than knowledge of his Commander's general plan, in other words, the purpose to be accomplished by the successful execution of the task originally assigned him.

In the Gallipoli campaign certain British units were landed, with orders to advance along certain lines. The Division Commander intended that these separated units support each other, and gain certain heights. During the action, the columns got out of touch with each other and out of communication with the Division Commander. The column commanders had not been informed of the general plan, but had been ordered merely to advance along prescribed lines. Certain units, who found the going easy, advanced beyond their intended objectives. Others who met with stern resistance had to fall back, and the result was great loss of life, failure of the attack, and loss of an opportunity. This is a situation which might easily be duplicated in any land operation. A sound interpretation of "mission" and its complete statement and understanding will go far to avert disaster.

The Naval estimate then takes up in turn the comparison of the strength of the forces opposed to each other and their present dispositions; enemy forces and their probable intentions; and finally our own forces and the courses of action open to them. While the treatment of these subjects differs somewhat as to details from the Army form, they are essentially alike. In both cases, the analyses lead directly and logically to the "Decision." Here a considerable difference exists. The "Decision" of the naval estimate consists of a "short, concise expression of a definite course of action, together with an expression of the end in view, or purpose, which is the *Task* in the *Mission*." Briefly the decision tells, for the whole force:

- (a) What is to be done.
- (b) How it is to be done.
- (c) Why, or for what purpose, it is to be done (Task).

This may be expressed as follows:

Decision=Course of Action plus Task.

(What and how) (Why)

The naval estimate ends with the sixth section, the Plan. This is a re-statement, in brief form of the task organization decided upon, that is the arrangement of the whole force into the desired subordinate task groups; what each task group is to do (its task); to what this is to be done (its objective); where; and with what (the forces constituting the task group). The estimate is now complete, and the commander is prepared to draw up his orders. In doing so, he transfers the "decision" of his estimate intact to



form paragraph 2 of the order, thus transmitting to all subordinate group commanders his general plan. The last section of the estimate, the Plan, is transferred bodily to the order, constituting paragraph 3, task assignments, paragraph 4, logistics or supply, and paragraph 5, communications and command.

A brief comparison of a naval estimate and the resulting orders with an Army type estimate and its orders will reveal immediately the greater initiative allowed naval subordinates in the execution of their tasks. There are many excellent reasons why this should be, but, on the other hand, the rigidity that results from this restriction of initiative of the subordinate militates against the ready adaptability to rapidly changing conditions which exist in landing operations.

Earlier in this paper, mention was made of differences in interpretation of certain fundamental principles, the objective and superiority (mass). It is recognized that military authorities have never agreed upon all the principles of war. Yet it does seem as if within one service there should be unanimity. As regards the principle of the objective, this unanimity does not now exist. A great deal has been written on this subject, and probably the final word has not been spoken. To many, an objective means solely the armed forces of the enemy or a particular part of those forces. But this interpretation is too limited for general application. In naval phraseology, an objective is some element of the enemy strength, men, material, or place, chosen for capture, destruction, or neutralization. There may be a primary objective and intermediate objectives. It is by the correct selection of the objective that sound employment of force is made. The objective may be a machine gun nest, a battery of 75's, a dominating position, a river crossing, a line of communication, or an army, depending upon the mission of the force involved.

No effort has been made here to revise the present estimate forms to meet the peculiar requirements of the joint Navy-Marine Corps operation. In fact, it is not at all certain that revision is necessary or advisable. But so long as the Marine Corps employs the form devised for and used by the Army there will continue to be some lack of understanding of the Navy procedure. It is with the hope of removing some of this understanding that this discussion has been presented.

## Typical Combat Patrols In Nicaragua

By FIRST LIEUTENANT J. G. WALRAVEN, U. S. M. C.

**M**OST of the contacts between Marine patrols and hostile forces in Nicaragua have been made in the Department of Nueva Segovia. No one who has served in this wild corner of the Republic will ever forget it. On every hand rise mountains and cliffs which awe the American who sees them for the first time. It seems impossible for man or beast to pass beyond such barriers. But these natural walls have been scaled time after time by patrolling Marines who have also sweated through the blistering heat of the valleys and forded the innumerable streams which cut the trails and add to the hardships of the march. It is hardly necessary to remind the readers of *THE GAZETTE* that there are no roads in Nueva Segovia and that many of the trails are mere cattle tracks. It is difficult to imagine a more discouraging country for the traveler.

The department has the rainy and dry seasons common to most tropical countries. Between September 15 and May 15 all ground below high altitude is parched and dry. The smoke from brush fires fills the air and settles like a fog over portions of the terrain, seriously impairing visibility. Miniature cyclones sometimes occur and are a warning of more hot, dry days ahead. The nights are cool and generally beautiful, giving a few hours' respite from the intense heat of the day. An interval of about one month marks the mean between the extreme dry and rainy periods. It is then that the rainy season shapes itself. Intermittent showers settle the dust and make the ground firm. All vegetation takes on color and the aspect of the whole country changes. During the rainy season hardly a day passes without torrential rains of many hours' duration. All trails become difficult to negotiate. Pack animals sometimes sink to their bellies in the mud. They become frightened and throw off their packs. Not infrequently they are badly injured. Many trails are completely washed out, and in the mountains dangerous landslides occur.

The Coco, principal river of Nueva Segovia, has a network of tributaries. All of these are swelled by the rainfall; creek beds that were bone dry become rushing mountain torrents flowing so swiftly that it is extremely difficult to ford them, if indeed they can be crossed at all. These new water-crossings add to the difficulties of the patrols. Valuable time must be consumed at each of them; for not only must the stream be forded slowly and carefully, but the security which attends any water-crossing must be established and maintained.

Trails are too narrow for troops to move along them in any formation but a column of files. There are innumerable cattle trails in the country which so closely resemble the main trails that one is often misled. In searching for an outlaw camp the patrol leader can seldom hope to find it



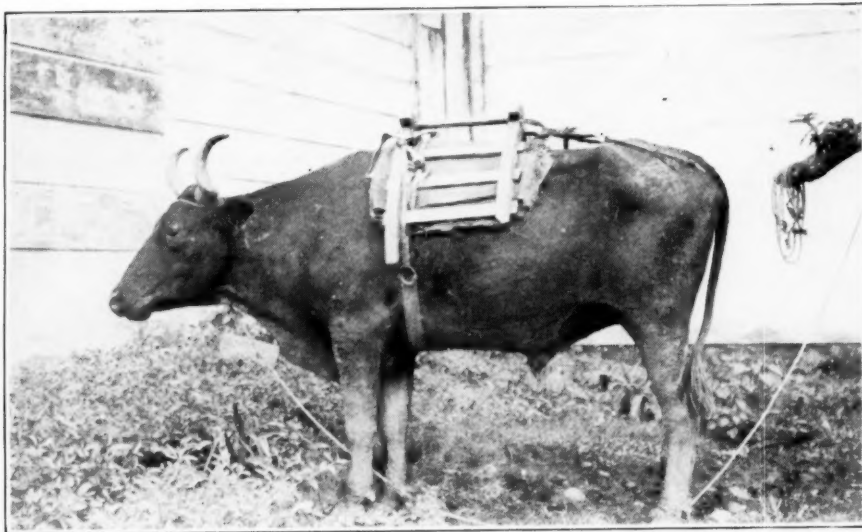
*A Patrol at Ocotal, Nicaragua, Equipped with a Tractor*



*Election Personnel Bringing in the Ballots from a small Nicaraguan Town*



*Small Marine Patrol Operating in the Nueva Segovia Territory,  
Nicaragua*



*Bull Pack-Saddle Devised by Marine Quartermasters for  
Use in Nicaragua*

on or near a main trail. Since they have been driven from the towns and hamlets the guerillas have taken up their abode in the bush. They have selected the most inaccessible places in which to build their mountain retreats and show considerable ingenuity in guarding them from discovery. They seldom build their shelters near their water supply or their cornfields, but in many instances water and food are brought from places five or six miles away. The children generally act as carriers of food and water and, if they happen to be apprehended by Marines, pretend to know nothing of their people. The camps themselves are interesting. They consist of crude huts which are widely scattered with the evident intention of making their identification from the air more difficult. Each hut is usually built around the trunk of a tree whose branches shield it from aerial observation. Outpost shelters situated on approaching trails are usually encountered about 200 yards from the main camp. One must have a practiced eye to spot such a place either from the ground or from the air.

The approach to a camp always means long and arduous marching. High mountain passes must be climbed. Deep ravines must be crossed where the lush growths of the tropics are so thick that natives have to cut a path before the patrol can proceed. Then perhaps the patrol must travel along the side of a precipitous elevation where a false step may mean a fall of hundreds of feet. Nueva Segovia is indeed a paradise for outlaws and guerillas but just the opposite for those who must pursue them. However, it is a splendid training ground for patrol commanders, for every day presents some new problem.

In describing the organization and operation of a typical combat patrol employed in Nicaragua I shall be obliged to repeat many things which are probably known to the majority of my readers. However, I must risk such repetition in order to present a complete picture of the subject. If what I write will be of any assistance to those who have yet to make their first patrol in bush warfare I shall feel that I have accomplished my mission.

Preparatory to starting on a patrol the commander must naturally ascertain his mission and make an estimate of the situation. He must then of course decide upon the best plan of action, which in part will include moving the entire patrol as close to the hostile area as possible without seeking contact, and establishing a base from which a highly mobile combat patrol can be sent out. With an initial column of the size shown in Plate 1 this can be accomplished since enough men can be provided without depriving the patrol commander of sufficient strength to remain in the field with an adequate combat force. Before starting the commander should see:

- (1) That men and animals are in the best possible condition.
- (2) That units are properly equipped.
- (3) That the accompanying train is loaded as prescribed.
- (4) That arrangements for the replenishment of supplies have been made.
- (5) That provision has been made for the care of casualties.



It should be noted here that as the patrol proceeds rations and other supplies will be diminished and the animals which have carried them will no longer be of any use; therefore they should be sent back with an escort. The patrol commander should then send back a report to Operations Headquarters setting forth the situation, describing his plans and telling how long he can remain in the field. Although the local situation may appear to be important, the general situation may necessitate that it be subordinated.

The patrol with which we are dealing consists of two officers, 50 enlisted men of the Marine Corps and one Navy hospital corpsman. The formation should include the following elements: 1. Mounted point. 2. Connecting files. 3. Main body. 4. Pack train. 5. Rear guard.

#### THE MOUNTED POINT

The patrol is designed to form four combat groups, each of which is capable of independent maneuver. The point not only performs its regular functions, but forms Combat Group No. 1. It is therefore desirable to have this unit mounted, because one of its duties is to give timely warning of the approach of the enemy; furthermore better visibility is obtained by a mounted man.

#### THE MAIN BODY

The main body is divided into two combat groups, each of which is capable of independent maneuver. The situation may demand that one group reinforce the point or the other units of the patrol. It would be fatal to permit both groups of the main body to reenforce the point or rear guard at the same time, as this would create a wide gap in the formation and immediately cause one flank of the point and one flank of the train to be exposed and to become extremely vulnerable. Moreover, the main body may have to hold the hostile group to its position while the other units maneuver to gain tactical advantage. Frequently the hostile group will permit the point to pass unmolested and then attack the main body. This situation has occurred many times in Nicaragua. It should also be borne in mind that it is impracticable to use flank guards on this terrain if any distance is to be covered swiftly.

#### THE PACK TRAIN

The Pack Train carries reserve ammunition, subsistence, cooking gear and bedding rolls of personnel. The men should never be required to carry extra ammunition in bandoliers, if pack animals are available. These bandoliers are made of cheap material and after a little use are worn to such an extent that ammunition is lost along the trail only to be picked up by hostile natives and turned over to outlaws. Then again, the stamina of men is sufficiently taxed without any additional burdens.

When Marine patrols first operated against hostile groups in Nicaragua, the only available pack-saddles with accessories were those used by the natives. These were unsatisfactory in design and were badly assembled.



They injured the animals' backs to such an extent that it took days to recondition them after a patrol. Packs fell off, and many times they slipped around under the bellies of the mules, causing them to rear and kick, spreading the pack over the ground. Repacking consumed much valuable time and made a lot of hard work. However, due to the ingenuity of officers and men the pack-saddle with its accessories has been greatly improved. Captain Maurice T. Holmes contributed a great deal toward this achievement. The most satisfactory pack-saddle now used is a product of his endeavor. Its construction is similar to that of the McClellan saddle, and it carries canvas bags to contain the load. This saddle is easily balanced and is adjusted to the conformation of the animal.

The Pack Train shown in Plate 1 is the most vulnerable point in the formation of the patrol. It is comparatively long and in contact does not permit of free movement. Its guard is not a tactical unit in that its mission is to keep the train from falling into the hands of the enemy. When the situation permits other units to change from the defensive to the offensive, the train guard must remain on the defensive, and at all stages of combat the commander should keep contact with his train and be prepared to reinforce its guard if necessary.

Strangers should never be allowed to pass through or precede patrols. In questioning civilians care must be taken not to disclose any information. This is especially true in the bandit-infested areas of Nicaragua, where the average native is illiterate but very shrewd and a past master in the art of evasion. The fact that a native is not actually caught with arms in his hands is no indication that he is not a bandit or the friend of bandits. Patrol commanders have found that many apparently passive natives secrete their arms and live openly in their huts until called by their chief to some rendezvous preparatory to laying an ambush for a marine patrol.

March discipline is all-important in such country as our patrols in Nicaragua have had to traverse. It is highly important that the patrol commander use good judgment in regulating his rest halts; frequency and length of halts are primary factors in the successful conduct of a patrol. They require a careful estimation of the psychology of the march as affected by the physical condition of troops, nature of the weather, condition of trails, length of march and loads carried by men and animals. The correct understanding and application of these factors assists commanders in conserving the endurance of men and animals, and is an essential step in building and maintaining the spirit and morale so that the patrol will cheerfully overcome the hardships and fatigue incident to marches and combat.

Security during the halt is provided by the establishment of small outposts at such positions that they can give timely warning of the approach of an enemy.

Once in the hostile area the commander is confronted with the problem

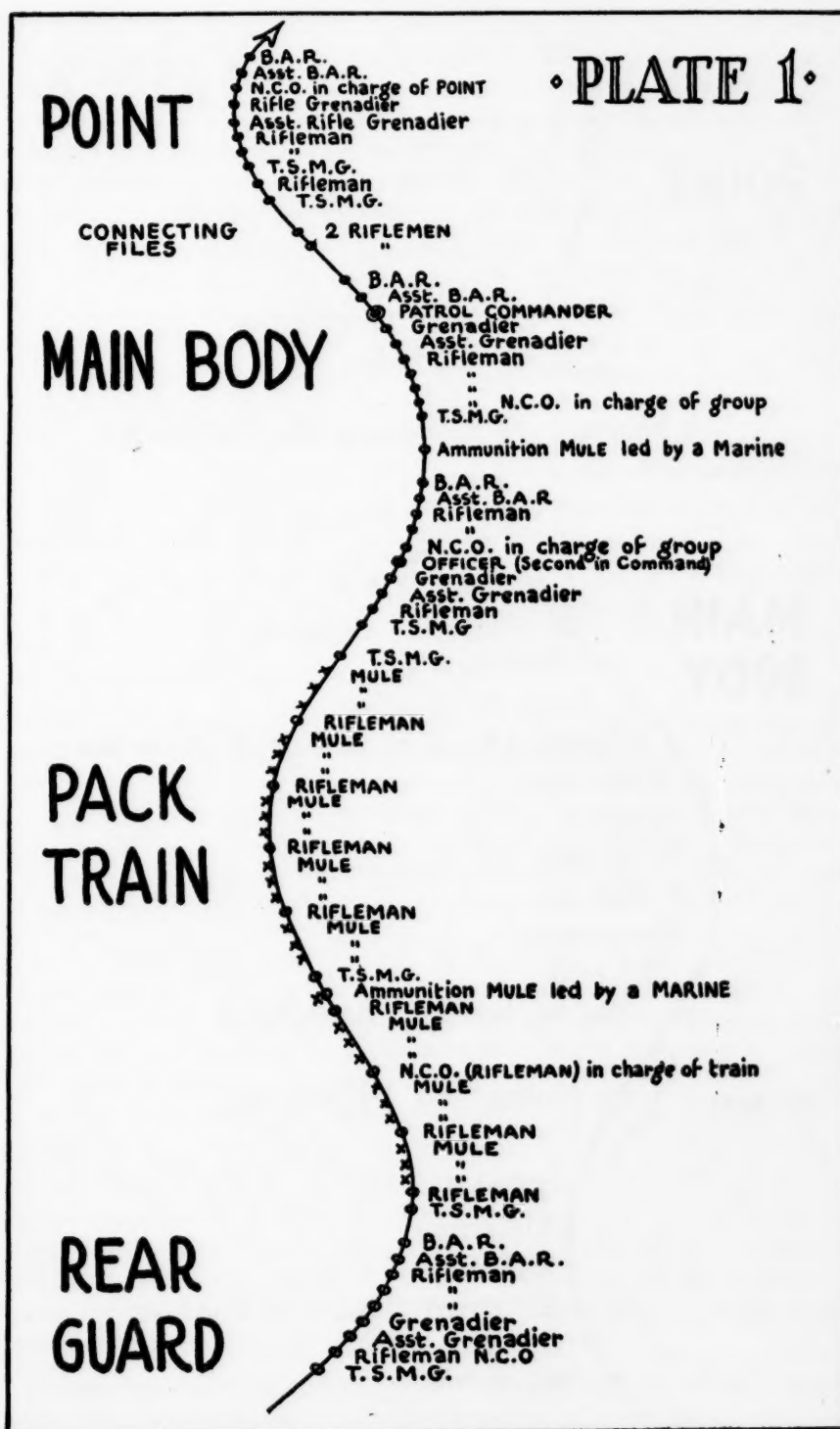
of selecting the first of a series of bases from which to operate. His estimate of the situation will dictate their location and time of occupation. From the established base a highly mobile combat patrol should be sent out. Since it is not burdened with a long, cumbersome pack-train, it can move rapidly and noiselessly, which is necessary if anything of military importance is to be accomplished. (For formation and equipment of a highly mobile combat patrol see Plate No. 2).

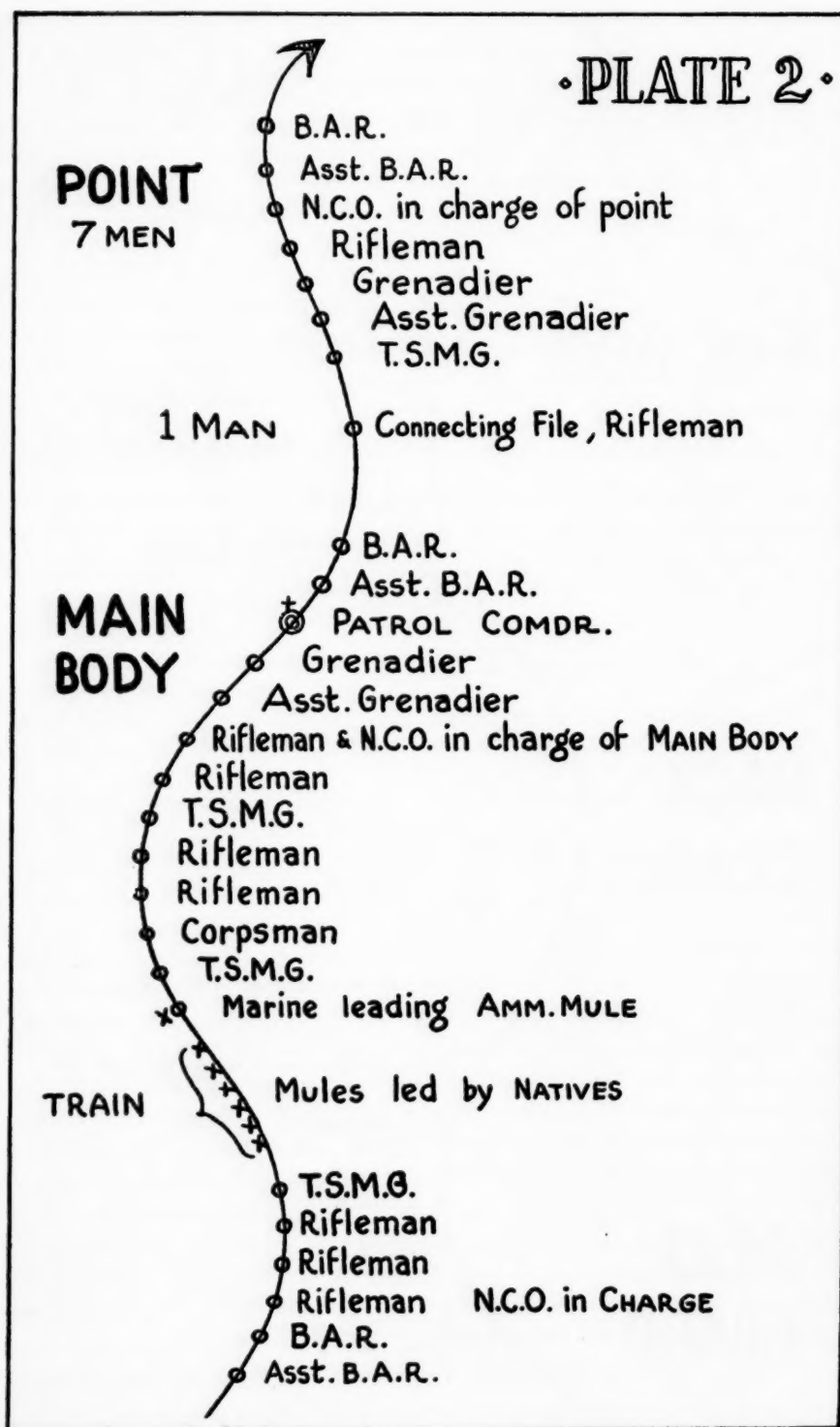
At halts for the night, a command must regulate its mode of encampment according to the degree of precaution which the information of the enemy may impose. The comfort of troops, though important, must be subservient to tactical requirements. Military necessity, in such patrolling as we have been conducting in Nicaragua, frequently leaves but little choice in the selection of bivouac sites, but, as in all tropical countries, the basic requirements of sanitation must be given the utmost consideration possible.

In the mountains of Nicaragua it is never advisable to pass a site suitable for bivouac late in the afternoon, unless one is familiar with the terrain and has in mind another place further along the trail which can be reached in ample time before nightfall. Darkness comes quickly in the hills, and I found that it was sometimes necessary to bivouac as early as three in the afternoon. In preparing a bivouac hastily in order to beat the approaching darkness important considerations may be neglected. In addition to establishing security, animals must be watered and fed, the evening meal must be finished, canteens must be filled and all fires must be out before dark.

Due to the nature of the terrain visibility is difficult beyond a few yards and the hostile force has the advantage of, and uses, one of the most important elements of combat—the principle of surprise. Since the natives' favorite method of fighting is from ambush, the terrain adapts itself very well to their tactical ideas. A hostile group disposed in ambush cannot be observed until the patrol is upon it, or perhaps until the leading unit has passed. Due to the rugged terrain and dense tropical undergrowth, it is impracticable in most cases to use flank security if the distance covered in any one day is to be of military value. The enemy forces depend largely upon delivering the initial burst of fire with its attendant element of surprise to gain temporary advantage. They do not fight an active defense by temporarily developing and containing the patrol and then striking a decisive counter-blow. In a carefully prepared ambush the hostile force will have sighted in on parts of the trail and the initial burst of fire is quite likely to have immediate effect. No matter how well-trained the patrol, the element of surprise puts it on the defensive for a few moments. This is one of the most important stages of the combat, and at this time the patrol commander must locate the enemy flanks and strong points in order that the tactical situation can be changed as soon as possible from the defensive to the offensive.

Once the enemy flanks and strong points are located the reduction of the





ambush commences. The patrol commander must send one or more combat units under their respective leaders to attack the strong points and roll up the enemy's flanks, thereby causing it to present a more vulnerable front. It is seldom that an enemy position will present a front long enough to equal that of the patrol when engaged, if proper distance is maintained between files. The maintenance of the proper distance between files is of paramount importance. This takes a great deal of time and patience. It is difficult to train men to do this, as it is their natural tendency to close up the column. The patrol commander should insist upon proper distance through group leaders, because it is an important factor in march discipline. We found eight paces to be a good distance along Nicaraguan hill trails. The importance in keeping a proper distance between files lies in the fact that it makes the patrol less vulnerable, permits of freer movement and covers more space on the trail. It would be disastrous to have a machine gun suddenly sweep the patrol from any direction if the files were too close. Free movement must be maintained at all times in order that the files may be able to take up the best firing position available and to move without being hindered by adjacent files.

After the enemy's flanks are rolled up rifle grenades can be employed to advantage by dropping them behind the enemy's position, close enough to damage the personnel and at the same time box it in, thereby holding it in its position so that the maneuvering unit may deal with it most effectively.

The importance of automatic weapons in such contacts cannot be exaggerated. To be sure they consume ammunition rapidly, but a reserve can be carried on pack animals in direct charge of marines; personal experience in Nicaragua showed that animals laden with ammunition should not be entrusted to native muleros. In an emergency it was sometimes necessary to shoot these animals to keep them from quitting the patrol and taking to the bush where their ammunition might fall into enemy hands.

If the front of the hostile force is greater than or equal to the front of the patrol deployed for action, the patrol commander must then depend upon the great fire-power of his automatic weapons to gain sufficient fire-superiority to permit him to extricate one of his combat units for maneuver. Hostile groups, such as those encountered in Nicaragua, cannot withstand the onslaught of well trained troops; but after contact is lost, pursuit is impossible—the natives scatter and disappear in the broken country to meet later at a rendezvous distant from the scene of the combat. Nueva Segovia lies on the Honduran border and in many cases such bands would reassemble across the line in the neighboring republic where pursuit by our troops was impossible. Naturally, many patrol commanders have been sorely tempted to continue the chase into Honduras, but such action would have developed embarrassing international complications.

I recall very vividly, so indelibly was it impressed upon my mind, a patrol which left San Albino during the dry season when the trails were in the best



condition. We were getting fairly reliable information at this time which conveyed the idea that Sandino was again near his old stronghold, Chipote. It was further reported that his main body was supported by two sub-chiefs with their respective groups, who had taken up a position not far from that held by the "Jefe Supremo". The information gathered was considered sufficiently important to warrant dispatching a large patrol into the area under suspicion to investigate at first hand the merit of the "intelligence" received. Captain Linehard with about 30 marines and Lieut. Davis, Guardia Nationale, with ten Guardia were sent from Ocotal with orders to proceed to San Albino. I joined the column there with 25 marines, and we at once proceeded to Chipote where a base of operations was established and plans for combing the area were made.

It was decided that on the next day I should move out with three days' supply and patrol to the east and north, while Lieut. Davis patrolled to the south. We were congratulating ourselves on having made a good day's march and preparing to string our hammocks when suddenly we were under fire. About 20 bandits had crept as close as possible to the camp without being observed and were pouring in rapid fire on us from a range of about 400 yards. Their fire was at once returned, and after five minutes had elapsed all was quiet again. When our rifle grenades began to burst near them they dispersed. I have often heard marines say that Nicaraguan bandits cannot shoot. Undoubtedly some are poor shots, but on this occasion two mules in the picket line were hit and a Guardia pointed out a bullet hole through his shelter tent. I can testify that two or three bullets came uncomfortably close to me. My patrol cleared the next morning before dawn. The terrain was enshrouded in a dense mist, and before we had gone far every man was drenched. The trail passed through valleys where the mud was so deep that we had to cut a new passage in order to proceed. We finally found a ridge trail that showed signs of recent use. The tracks of heavily laden pack animals had much significance and we followed them. We had marched a great distance that day, hoping that chance would decree our overtaking a bandit pack train. The air service had reported suspicious activities in this locality a few days before. We finally were forced to halt for the night, and went into bivouac a few yards from the trail we had followed all day. The night was inky black and security had to be pulled in close to where the men slept. Later it rained and our clothes, which were just beginning to be dry enough for comfort, became drenched anew. In spite of fatigue few of us slept.

We renewed the march early in the morning, thinking that no matter what discomforts awaited us, they would be preferable to that night's bivouac. The tracks we were following began to look very suspicious. One of the men picked up a small wallet containing some bits of dried meat which were none too fragrant. The guide told me that perhaps a bandit had dropped it. He seemed sure that we were going to find what we sought. We were proceeding



slowly now, examining the trail as we went, when suddenly the bull and bare-foot man tracks abruptly left the trail, going into the brush to our right. The Point and myself proceeded down the side trail to make a reconnaissance and had not gone far when we heard voices. We crept a little closer and saw a native woman raking up embers around a camp fire. Nearby sat a motionless figure wrapped in a blanket, almost obscured by the heavy fog. The man, tense, leaned forward and peered through the imperfect light. As we crept closer a tropical sun burst through the fog and three pack bulls were observed tied to trees near a native hut. People seemed to be moving around inside and soon a man wearing Sandino's colors on his hat, appeared and placed some object on one of the bulls. I observed other trails leading from the hut into the brush, one of which led to Chipote.

The Point was left to guard the trail already occupied, while I returned and brought up each unit leader, pointing out to him the various trails leading from the hut and told each of them what we had already observed. They received orders to block all avenues of escape at once by deploying their respective units astride trails and, at the same time, keeping contact with adjacent units as closely as possible. The plan was no sooner executed than the bandit already observed reappeared with a companion. Both began to pack bulls with shelled corn, pieces of leather, bolts of cloth and shoe soles. Having made a hasty inspection of their packs and tightened the cinches on their animals, they untied them and started up the trail where I was posted, still unobserved. The two men with their laden bulls approached closer and all was ready to effect their capture when a marine who had little training fired at the leading bandit and missed him. I thought that I had developed patience to some degree, but this incident certainly taxed it. The bandits instantly plunged into the bush and ran. About 100 rounds of ammunition was expended in getting two men. One was identified as Ruperto Hernandez, who was Sandino's chief forager in the Chipote area. How much better it would have been to have captured these men and gained the valuable information that they could have given. One of the most important principles of patrolling, had been violated by one untrained man.

I had always trained my men not to fire on individual enemies or small groups who were coming down a trail toward the patrol, but to quit the trail immediately, taking cover in the bush and at the same time passing the word to the patrol commander or a unit leader. Unless one is very near a startled native he will run when challenged. If he is killed he can give no information, and the sound of firing will have given the whole country-side warning of the presence of an enemy.

On the third night the patrol returned to its base, as per schedule, without anything else of military importance having occurred. After I had turned in I lay awake some time reflecting on the Hernandez incident. It became very apparent to me that all men before being assigned to patrol duty should receive

more training. Frequently officers who had been in the hills some time patrolled with men whom they had never seen before—men who were either untrained, or badly trained. Each patrol officer should have his own patrol, which has been stabilized, in order that he may instruct and train his own personnel. Active service demands not only individual competence, but also coordinated effort in order that the required standard of individual efficiency can be maintained. Officers and non-commissioned officers require practice in handling their own men under all conditions. The collective training of the patrol is essentially the duty of the patrol officer. No amount of training in schools can replace that which is gained in the field. The officer who leads his men in combat is the one best qualified to judge whether the men have attained the necessary standard of proficiency. In any training schedule that a patrol officer may adopt, musketry problems should form an important part, and a great deal of careful and thorough instruction should be given in these exercises.

It is very laudable for marines to attain high standards of proficiency on a rifle range, but training in rifle practice should *not* stop here. Rifle range firing should be followed by problems that simulate combat conditions as nearly as possible. I have actually seen marines who were rated as expert riflemen at the range miss a man at twenty yards. In combat, targets appear and disappear suddenly at variable ranges. Firing conditions are vastly different from those encountered on a rifle range. Also, in bush warfare, battle sight is generally used and few men have had any experience with it unless they have been properly trained.





*The Rio Coco, Nicaragua*

## THE SPANISH LANGUAGE AND THE MARINE CORPS

*By* MAJOR C. S. BAKER, U. S. M. C.

**T**HE RECENT experience of the Marine Corps in Nicaragua has indicated more forcefully than ever before that there should be in the Corps an adequate number of officers who read Spanish and speak it correctly and fluently. A great deal of our duty in the past has been performed in Spanish-American countries—Cuba, Panama, Nicaragua, Mexico, San Domingo; and again in Nicaragua, where in a sense the last and largest of these expeditions is still being conducted. In San Domingo and Nicaragua, as a corollary to our campaign of pacification, we have had the additional task of organizing and training a native guardia and administering its affairs. Besides the expeditions already mentioned, Marine officers have frequently faced situations in other countries where knowledge of Spanish was of the greatest value. The trouble in Honduras in 1925, although of comparatively short duration, is a case in point; and though Vera Cruz occupied the spotlight during our misunderstanding with Mexico, there were other places in the same country during that period where Marines came into contact with the population, and where they would have been far better prepared to conduct their affairs and arrive at correct decisions if they had been able to speak Spanish.

It is asking too much to demand that every officer should know Spanish well; but surely there should be many of them who have a good working knowledge of the language.

It is evident that for some time to come there will be a force of Marines in Nicaragua. Although it appears that an era of peace is at hand in Central and South America, history tells us that outbreaks have occurred in the past; and similar disturbances may occur in the future even in countries which now enjoy peaceful government. That being the case, the Marine Corps may be called upon to intervene, as in Nicaragua, to protect the lives and property of Americans and other foreigners. Even in time of peace there are always Marines aboard the vessels of the Special Service Squadron which touch at Spanish-American ports; and the ships of the Battle Fleet, from time to time, visit South American countries.

It is hardly necessary to say that officers entrusted with intelligence duty should be able to read and speak fluently the language of the country in which they may be operating. How many officers in the Marine Corps can do this? There are some, but certainly not enough. But this is only one of many activities incident to an intervention or occupation. In our Central American expeditions we have always been called upon to intervene between



political parties, members of which are continually coming before Marine officers (from the Commanding General on down the line) complaining of injustices committed against them or theirs by members of the opposite party. Complaints against Marines, too, are frequent—and not all of them are unfounded, though most of them are. Lacking the ability to speak Spanish, officers dealing with native citizens are forced to rely upon interpreters; and it is axiomatic that all Spanish-Americans are fanatical adherents of one political party or another. It was impossible in Nicaragua to find one native interpreter who was not a member of either the Conservative or Liberal party; and therefore in almost every case of a complaint, one side or the other felt that the matter had been misrepresented to the officer by a biased political interpreter! During the most active period of our occupation, Marine officers throughout Nicaragua were thrown into almost daily contact with the native population and in some cases were at the mercy of their interpreters.

In a business sense—and a great deal of business is transacted by an expeditionary force—the Marine Corps needs many officers who can speak Spanish. It needs them not only for reasons of speed and efficiency, but for economy as well. The events of the Nicaraguan campaign clearly indicate that the lack of Spanish-speaking officers in the Quartermaster Department cost the Marine Corps a great deal of money; a sum that would undoubtedly have defrayed the cost of giving many officers instruction in Spanish, other than the correspondence courses which are now the only form of training available. In Nicaragua almost all fresh foods were bought from natives. In the same manner horses, mules, bull carts and equipage were hired or purchased. Practically all of these transactions were made through native interpreters—interpreters, I might remark, who were seldom averse to getting a rake-off on every deal. Sellers were forced to increase the price a little to meet the demands of the interpreter. In fact there were cases in which investigation showed that the interpreter himself suggested that the merchant raise his price so that he, the merchant, would not only be able to pay the interpreter's "commission" but have an additional profit for himself. I am convinced that the prices of certain commodities were advanced and upheld through the efforts of the very interpreters whom we were paying to help us. A competent force of officers who could speak Spanish would have been able to hold prices to a reasonable level, eliminate the graft and save the wages of the interpreters.

One thing that saved the Marine Corps in Nicaragua to some extent in its purchases was the action of certain outsiders who were not in league with the interpreters (they probably did not belong to the same political party) and who, in their greed to get some of the money the "Americanos" were spending so freely, disclosed the fact that we were paying higher prices than were necessary.

During the last occupation of Nicaragua, detachments of Marines were scattered all over the country; all the cities, all the big towns, and most of the small villages in Western Nicaragua were occupied. Patrols and small columns were constantly moving about the country. And, sad to relate, hardly any of these detachments had among their number any officers who could really SPEAK Spanish and thus maintain real contact with the native population. The native Nicaraguan, to a certain extent, may have distrusted us; but one thing is certain: The Nicaraguan Conservative trusted the American far more than he did the Nicaraguan Liberal, and the Liberal had far greater faith in the American than in the Conservative. There was little criticism, in so far as the writer could learn, of the fairness of the Americans' dealings; but there were many expressions of opinion from the Nicaraguans themselves to the effect that the Americans' interpreters presented matters to them in a biased way, and distorted facts in an effort to place the interpreters' own political faction in a better light.

A fine example of this is the manner in which affairs were arranged for the municipal elections of 1927, a year before the presidential election. It was decided that the Americans would "observe", not conduct, these elections. This was done in order that we might learn something of Nicaraguan electoral methods. In all parts of the country Marine officers, non-commissioned officers and privates were detailed to watch the conduct of the elections. They were instructed not to interfere, except to suppress disorder. It was necessary to provide the observers with interpreters, if they were to know what was going on. In order that there might be no charges of partiality, it was decided that half of the interpreters should be Conservatives and half Liberals. (It was recognized from the start that it was a vain hope that any impartial native interpreters could be found in all Nicaragua.) So one interpreter was hired for each voting precinct, half of them Conservatives and the rest Liberals. This was true impartiality and was recognized as such by the Nicaraguans themselves. But what was the reaction to it? Why the Conservatives simply hired their own interpreters to accompany every Liberal interpreter so that he could not misrepresent matters to the Marines. At the same time the Liberal party leaders engaged interpreters of their own political faith to check up on every Conservative interpreter. Need more be said to show the impossibility of securing impartial interpreters in Nicaragua? And there is every reason to believe that the same situation exists in all the other Central American countries.

Forces of intervention and occupation are usually required to respect and observe the laws of the country in which they are operating in so far as they do not interfere with their mission. In order to do this well, it is necessary that at least one officer familiarize himself immediately after landing with the laws in current usage. Prior intelligence may have provided him with much of this information, but there are many details to be learned

after landing. A knowledge of law may be helpful to such an officer, but a knowledge of Spanish is essential. Certainly all officers who are brought into contact with diplomatic, political or police officials must know the language of the country or be placed in a position of great disadvantage.

There is another type of duty for which officers with a thorough training in Spanish are necessary. Properly educated in the language, such officers will be able to teach it. If, during an occupation, it should be necessary to teach the language to a large number of officers and men, competent instructors would be instantly available. We faced just such a situation in Nicaragua, where it became necessary to give a comparatively large number of enlisted men a rudimentary knowledge of Spanish. Sufficient instructors could not be found among our own officers, and we were compelled to draw on the Navy. It is hardly necessary to point out the fact that it would have been far more beneficial to our prestige, not only with the natives but with our own enlisted personnel as well, if we could have found enough Marine officers for this instructional duty.

One step has been taken in the right direction. Marine officers of certain ranks are now required to take a correspondence course in either French or Spanish. A good many of them take Spanish and in that way manage to learn something of the language. Admitting that an honest effort applied to this correspondence course will give a student a certain ability to read Spanish, and will enable him to acquire more easily a speaking knowledge of the language when he later comes into contact with Spaniards, it is certain that this course alone will not teach him to understand the language or to speak it sufficiently well to be of much use. Graduation from this course may give a man a diploma, but it will not enable him to order one simple meal in the Spanish language, to say nothing of hearing and deciding a dispute between two fast-talking Spaniards. And God help the Marine detachment in the field that has to confide its destinies to an officer who depends on his correspondence course to enable him to understand the report some native scout brings in! The correspondence course in Spanish is a step in the right direction, but it does not go far enough.

There is a real need in the Marine Corps for a large number of officers who can speak Spanish fluently, but we will never get them through correspondence courses alone. We must send every year a certain number of officers to a Spanish-speaking country, preferably to Spain itself. There is a different dialect in each of the Central American countries and in each of the South American nations too. A native of those countries can tell, after a few words, whether the speaker comes from Nicaragua, Costa Rica, Salvadore, Argentine or any of the other American nations where Spanish is the basic tongue. If the Marine Corps is to educate its officers to speak Spanish properly, it should send them to Spain. It is true that these officers would not learn to speak Central American Spanish, but that would not be desirable.

As the writer has already indicated, there is in fact no "Central American Spanish"; but rather a peculiar dialect or patois for each of the countries. It is far better for officers to have an accent which is, in a sense, impartial; and this would be particularly true in the case of a dispute involving two of the Central American nations. A person who speaks Castilian never has to apologize for it, as Castilian is the recognized language of the cultured Spaniard all over the world. After two years of study in Spain any officer should be able to speak, read and write excellently; and should at the end of that time be fitted to perform duty as an interpreter for business, military or social purposes.

There is a precedent for sending officers to foreign countries to learn languages; we now send them both to China and Japan. For years we have had language students in those countries. Regardless of the value that these linguists may have been to the Marine Corps, the writer has no hesitancy in asserting that an equal number of officers who had spent the same time studying Spanish would have proved far more useful to us. The Army has officers learning Spanish, and the Navy sends officers to Spain to study the language. Why should not we, who have far more duty in Spanish-speaking countries, give our officers the same opportunity? Then, when the occasion arises, we shall be properly prepared to go into the field without finding ourselves at the mercy of a horde of hired interpreters.

There is little expense involved other than the transportation of the student officers across the Atlantic. We may be short of commissioned personnel, but we surely cannot be so short that we must deliberately neglect something that would immeasurably add to our efficiency and prestige. Furthermore, the expense of sending a group of officers to Spain for two years would more than be made up in the saving of interpreters' salaries alone in but a few months of any future expedition. The writer cannot give an accurate estimate of the total sum paid to interpreters in Nicaragua, but it is safe to say that it would pay the travel expenses of many officers to Spain and back. And the total of these salaries was a small amount compared with what the Marine Corps lost in indirect ways.

So far we have considered only the financial side of the question. Our loss in prestige, social and political, is something that cannot be measured in mere dollars and cents. In Nicaragua our officers were in constant contact with high political and diplomatic officials. Practically all of their dealings had to be carried on through interpreters. No armed force of any civilized nation of the world, except our own, would occupy a country—particularly to settle a serious political dispute—and place itself in the humiliating position of being forced to employ interpreters from the very ranks of the disputants.

The writer has seen Nicaraguans come to protest to the Marine high



command of ill treatment or injustice at the hands of political opponents; has seen them arrive with a complaint apparently well founded, only to leave without even stating their case, because they discovered that the interpreter through whom they would be forced to deal was of the same party as those against whom they wished to complain. They were so sure their complaint would be distorted by the interpreter that they felt there was no hope of an impartial hearing.

## Ruined Rifles

By MAJOR HARRY L. SMITH, U. S. M. C.

**A** FEW years ago the writer would have said that the last thing our officers needed was instruction in the care and inspection of rifles. Two years of experience at the Depot of Supplies, Philadelphia, where our rifles are sent to be reconditioned, has altered this opinion radically. Eighty per cent. of the rifles with unserviceable barrels received at the Depot reached that condition not because they were shot out, but because they were RUSTED out. Here is a state of affairs that calls for an immediate remedy, and the best remedy the writer can suggest is more knowledge of the causes of rifle barrel deterioration and their prevention.

Last year the ordnance section of the Depot made \$120,000 worth of repairs which were necessitated by incorrect action or lack of action on the part of officers in the preservation of rifles. In endeavoring to obtain some sample barrels to show to the students of the Company Officers' School, we examined 3,000 unserviceable rifles. In this group we did not find a single barrel which had become unserviceable through service alone. All had been ruined through neglect, improper cleaning, and as a corollary, lack of proper inspection by officers.

At this point there are some who will say that these rifles deteriorated during the World War, at times when the exigencies of the service would not permit proper care. The answer to this is that the same proportion (80 per cent.) holds good for rifles made too late for service overseas. Furthermore the Depot is now receiving unserviceable rifles which were rebarreled and refinished in 1919; and these reveal the same proportion of neglected barrels.

This condition is not new, nor is it confined to our own service. In 1915 Army Ordnance published an article in which it was asserted that 50 per cent. of the unserviceable rifles received by the Army Ordnance Department for rebarreling could be traced directly to lack of proper care. Whelen makes the same statement in his book which was published in 1909. The British service reported the same condition as early as 1906. It is apparent that for years at least 50 per cent. of all unserviceable military rifles reached that condition through lack of care and inspection or the employment of incorrect methods of cleaning. And our work in the ordnance section of the Depot of Supplies shows that this condition still exists in the Marine Corps.

This means a large annual expenditure which we can ill afford. Besides the money loss, this neglect directly affects our military efficiency. This condition means that, in the hands of our men, the same percentage of rifles are already unserviceable or are prematurely becoming so through improper care. Yet these rifles would go into the field if war broke out.

Much can be said concerning loss of efficiency in war time due to rifles

which will not shoot accurately. Briefly, this is the picture painted by inaccurate rifles in war: Assume that your company, all with accurate rifles, is engaged with its fire action employed on a hostile target; your cone of fire is well placed and your company is suffering slight losses from this particular enemy target. Now substitute 20 per cent. of inaccurate rifles. Your cone of fire becomes larger, causes less loss to the enemy and increases your own percentage of casualties. Deteriorated rifle barrels are now being paid for in terms of the blood of your own men—to say nothing of the possible effect upon the outcome of the fight. In time of peace inaccurate barrels cost cash; in war they are paid for in the lives of our own men and in reduced battle efficiency.

The question may arise: How were they ruined, and who is to blame for these ruined barrels? Rifles become unserviceable mainly in three ways: through lack of cleaning, incorrect methods of cleaning and lack of proper preparation for storage. I wish to emphasize the assertion that most of the trouble starts with improper cleaning or the lack of cleaning after firing.

The responsibility rests with us, the officers of the Marine Corps. Either we have failed to teach our men how to clean and care for their rifles, we have taught them improper methods, we have not made enough inspections, or we have failed to make our inspections at the right time. If we taught our men how to care for their arms properly and then checked on them by means of frequent inspections, the rifles would remain in good condition. These are simple statements which we all know to be true, but like all obvious truths, they must be restated from time to time if we are to remember them.

Of course there are some extenuating circumstances, although they do not wholly relieve us officers of our responsibility. Some of us have undoubtedly fallen into the habit of assuming that, because a man has gone through the recruit training depot, he has learned to care for his rifle and needs no further instruction from us. But we do not quit drilling just because our men have mastered the close order movements. However, many of our outfits outside the recruit depots never give a minute's instruction in the care and cleaning of small arms. Where such instruction is given, it is, in many cases, left to the N. C. O.'s who may carry out their task in a perfunctory manner or actually teach incorrect methods.

It is extremely easy to develop improper methods and to fall into the habit of using the wrong materials. It all depends upon the source from which your information on the care of rifles has been obtained. The writer has read through 27 different books and pamphlets on the subject of fire-arms written from the point of view of both the American and British services; and the impression gathered is that there are almost 27 different ways of caring for rifles. The cleaning methods and materials described by some are almost the exact opposite of those set forth by others. There are so

many conflicting opinions that they cannot all be correct. We must discard some of them as bad, unless we accept in this case the saying that a poor plan vigorously carried out is better than no plan at all or than a perfect scheme poorly executed.

Here are a few examples of conflicting opinions. In one English publication, "Lessons and Lectures on Musketry Instruction," we are told that in firing the heat expands the barrel and permits the gas and powder fouling to be forced into the pores which close up and hold in the fouling when the barrel cools and shrinks; by using hot water the barrel can again be expanded sufficiently to reopen the pores so that the fouling can be flushed out. This writer was off the track in his theory that fouling was forced into the pores, but he made a bulls-eye on his hot water treatment. If we all followed that part of his instructions our rifles would be in better condition today. Another authority, "Target Range Pocket Book," an American publication, asserts that metallic fouling is in no way detrimental to a rifle; but, on the contrary, is beneficial, as it offsets erosion. Yet in the same year another American authority (Whelen) strictly required the use of ammonia dope to remove metallic fouling and described the harm such fouling does to the rifle barrel—and so it goes.

Take the last word on the subject, our present Training Regulations, and we find that 320-10, U. S. Rifle cal. 30, refers to primer fouling as the most frequent cause of damage, whereas TR. 150-5, Rifle, Individual, does not even mention primer fouling; 320-10 prescribes the use of the wire brush, and if none is available, tells us what to do; 150-5 never refers to the use of the brush; 150-5 prescribes water or commercial solvents for cleaning, whereas 320-10 never mentions commercial solvents; Tr. 320-15 asserts that the barrel absorbs powder and primer fouling, but 320-10 makes a contrary statement.

Some of us have followed the wrong master; others, running into these conflicting statements, have come to the conclusion that no one really knows and have applied their own ideas. Some rifle-team ideas of cleaning have filtered into the service. Many of these were all right for the team but would not work under general service conditions. Once the rifle team fired greased ammunition and never cleaned from the beginning of the season to the end. This worked but probably only because the rifles were fired every day, and at night the film of burnt grease was sufficient to prevent the beginnings of rust before the rifle was again fired the next day. Even if this method were good, the use of grease with the present-day ammunition is out of question because of the danger of blowing up the rifle.

It is possible to use a method which has given absolutely good results in one case, but which, due to some unusual factor, will not work in another. Here is a case in point: In 1921 a new ammunition came out which was prescribed for use in the National Matches. In practice this new ammunition



produced a fouling which gave us much trouble. The usual methods of overcoming fouling gave no results. All the service teams had the same trouble. Letters flew back and forth between the various teams and their headquarters in Washington. Finally the Arsenal brought out a cleaning fluid which was described as able to remove all fouling produced by the new ammunition. This we tried without result. Thousands of rounds, it was asserted, had been fired at the Arsenal without developing any fouling which ordinary methods would not remove. We wasted many hours concocting lubricants which would prevent the fouling but with no results. We could not understand how this ammunition gave us trouble but gave the Arsenal none. Finally we hit upon the secret. Guns cleaned while still warm from firing were freed from the fouling. In test firing at arsenals guns are cleaned the minute the shooting is finished. The ordinary rifleman makes no particular effort to clean while his gun is warm; usually it is anywhere from twenty minutes to two hours after the last shot is fired. In this case both the arsenal and the team shooters followed their customary habits. What worked with one did not work with the other, due to the difference in the time-interval before cleaning, and I doubt if the arsenal authorities know to this day why this ammunition fouled with the team shooters and not with them. I might say in passing that the Marine Team that year was the only one which did not have fouling trouble, also that the ammunition which caused it has been discontinued.

The moral of this story is that one must know every factor that enters into a successful scheme, and that what was good ten years ago may not be worth anything today.

Practically all cases of rust start through improper care following range firing. In considering the cleaning process itself, we must discard many old ideas which have become fixed through long familiarity. The only books to follow are our own Marine Corps orders and training regulations. While on the range we should avoid trying to clean with Hoppe, sperm oil or other outworn methods.

To get at the heart of the subject we shall have to consider what goes on inside the barrel of a rifle during firing. When the rifle is discharged the bullet is propelled by the expanding powder gas under a pressure of approximately 50,000 pounds per square inch, and a temperature of 3,900 degrees is developed within the barrel. The bullet, starting with a rotation of nothing when it leaves the cartridge is rotated by the lands and grooves within the barrel until it develops about 3,000 turns a second at the muzzle. As it passes through the bullet leaves a slight film of jacket metal in the scars and scratches on the inside of the barrel. In boring and rifling the barrel the cutting tools leave slight cuts and scratches on the surface of the metal which also has its own natural scars. All of these are, of course, much too small to be seen by the naked eye, but they are there nevertheless and scratch the metal of the bullet jacket.

The powder deposits in the barrel what might be roughly called an ash. The primer contains potassium chlorate, which upon discharge, becomes potassium chloride and is deposited upon the barrel. Potassium chloride is similar to common table salt and has the same powerful affinity for atmospheric moisture. This can best be illustrated by comparing its quality of absorbing moisture from the air to the condition of a salt seller on rainy days. Now metallic fouling by itself is harmless and so is powder fouling, but the primer fouling rapidly absorbs moisture from the air, and as we all know, nothing rusts metal faster than salt water. If the proportion of water in the air is high enough (about 65% humidity, which is not at all uncommon) the fouling will absorb water, and we will soon have a beautifully rusted barrel. If the humidity continues and the barrel is wiped out daily—but not with water or an aqueous solution—each morning will show more corrosion which will continue from five to ten days after firing, depending upon the humidity of the air. It is also true that if the humidity remains below fifty the barrel will show no signs of rust for an indefinite time. The black, varnish-like powder fouling, while harmless in itself, tends to make the task of reaching the primer fouling slightly more difficult. The metal fouling, which does not cause rust itself, does sometimes cover up the primer fouling which gets into the tool cuts and metal scars, permitting rust to form below the metal fouling when removed.

In cleaning it is necessary to remove all three foulings—the primer fouling because it will cause rust, and the other two in order to reach the first which may be hidden beneath them. The primer fouling, like salt, dissolves in water and other aqueous solutions, and this dissolving process is absolutely necessary to clean out the tool cuts and metal scars. It might be possible to remove some of this fouling on the lands and grooves by friction, but mere rubbing will never remove it from the metal scars. Powder fouling is in itself harmless and would present no difficulties if it were present alone. If metal fouling exists it can be removed only with an ammonia preparation.

Trial has proven the worth of the following cleaning method:

- (a) Clean as soon as possible after firing, the earlier the better, for cleaning is easier before the fouling has had a chance to grow hard.
- (b) Run a brass brush soaked with powder solvent (chloroil), carried by the Depot Quartermaster, three times through the barrel. This will scratch off the foulings and give the chloroil an opportunity to penetrate everywhere.
- (c) Follow with two patches soaked in chloroil, giving each patch ten round trips through the barrel.
- (d) Dry out the barrel with dry patches.
- (e) Inspect barrel; if not clean repeat the cleaning.
- (f) After barrel is clean, run through a patch soaked in chloroil

and put away for the night. The chloroil solvent not only acts as a preservative during the night, but permits further action upon any primer fouling which may remain in the barrel. However, the solvent should not be used as a preservative for periods longer than twenty-four hours.

(g) Before shooting next morning clean out the barrel with dry patches.

(h) Upon the completion of range practice or of any other extended period of firing the rifle should be cleaned with a water solution. Water cleaning must be resorted to when no chloroil is available and should always be used after the completion of range firing when chloroil has been employed for day-by-day cleaning.

When using gilding metal bullets—and that is about all we shall have soon—we never seem to get much metal fouling while using the chloroil solvent. For dissolving primer salts, one of the following should be used, preference being given in the order in which they are named: Hot water and issue soap, sal soda solution, hot water alone or in its absence cold water. The muzzle of the rifle should be placed in the solution which is pumped in and out of the barrel twenty-five times. A brass brush should then be run through the barrel for three round trips. The water solution should again be pumped through for twenty strokes of the rod. Then, with a dry ramrod, the barrel should be thoroughly dried and cleaned with dry patches. If no brass brush is available the sal soda solution should be used; it tends to loosen the fouling and permits the water to reach the primer salts.

After it has been cleaned and dried the barrel should be inspected for metal fouling. If supro nickel bullets have been used this fouling will show up near the muzzle in the form of lumps or flakes of a lead color. This must be removed with the standard ammonia dope solution. If gilding metal bullets have been used, inspection may show a slight wash of fouling. Instead of comparatively isolated lead-colored lumps, the barrel will appear to be thinly plated with copper. As a matter of fact this fouling is seldom visible. The gilding metal deposit should be swabbed out with the standard swabbing solution. In using an ammonia solution great care should be taken to thoroughly clean it out of the barrel and from any other portions of the rifle with which it may have come into contact. Otherwise the ammonia will start rust very quickly. After the rifle has been cleaned a rag saturated with oil (sperm) should be run through the barrel before the rifle is put away for the night. In the morning the oil should be run out before firing.

For daily cleaning while firing chloroil is preferred to the water combinations. The latter will cause rust, unless thoroughly removed from all parts of the rifle before it is put away. The water is apt to get into the chamber or the magazine and also may work into the trigger mechanism. They must all be thoroughly dried or our old enemy, rust, will surely show up in time. Chloroil is not dangerous in this way. Water will not touch

metal fouling, whereas chloroil will remove light metal fouling and thus do away with the necessity of using the ammonia swabbing solution. Chloroil has for short periods the preserving power of oil, which may at times be very convenient. The best of the substitutes for chloral involves the use of hot water, which is not always at hand.

A rifle may have a perfect barrel and still be inaccurate if the chamber is shot. If the chamber surface rusts and wears away sufficient to give a head space greater than 1.956, the rifle is useless; or if the chamber is sufficiently worn to permit the cartridge to lie so that its longitudinal axis is not in coincidence with the barrel axis the rifle will be inaccurate. In such cases the bullet will enter the barrel at a slight angle; the pressure of powder gases will deform the base of the bullet, causing inaccurate flight. A chamber which is merely dirty or has rusted so slightly that the accuracy of the bullet is not affected may still cause trouble. Difficulty is frequently experienced in loading where the chamber is thus neglected. Fortunately, the chamber does not foul up like the barrel, and all that is necessary to clean it is to run a dry rag into it and twist it around a few times.

To prevent undue wear and facilitate bolt manipulation the sear notch and locking lugs should be rubbed daily with an oily rag, after which the parts of the bolt should be rubbed with an oily rag to facilitate their action and protect them from rust.

All this is the job of the enlisted man armed with a rifle. It is the officer's duty to see that he understands this job and has the materials with which to do the work. During the period of firing every rifle should be inspected daily. A non-commissioned officer should be held responsible for the cleaning of the arms of each squad. He should be held strictly accountable for the care which his men give their rifles. Upon the completion of range firing the rifles should be cleansed as already described on three successive days and inspected by the company commander.

When not in use for target practice the care of the rifle is extremely simple. It consists mainly of keeping a thin film of oil in the bore, chamber and bolt. In this instance the only object of cleaning is the protection of the rifle from the formation of rust through atmospheric moisture. With a rifle that has been properly cared for, the cleaning before daily troop inspection need be no more than the running of an oily rag through the bore. Men should not be forced to go to daily troop with dry rifles. The inspection of rifles at these daily formations actually should have for its chief mission the assuring of the inspecting officer that the rifles have been properly oiled. If the rifles are clean and free from rust the bores will appear bright and clean with a light coating of oil. If for any reason it is necessary for the men to appear for inspection with dry rifle barrels, they should be oiled again as soon as possible after the formation; and a careful check should be made so that no rifle is put away with a dry barrel. During an inspection



the outer parts of a rifle are, of course, dry. The handling of these dry metal parts will sometimes start rust spots where the hands have touched the metal and an oily rag should be run over every place that has been touched by hands as soon as the inspection closes.

There are those who seem to think that the stock of a rifle is always serviceable no matter what its appearance may be. This is not true; the warping of the stock may easily affect the shooting qualities of a piece. The warping of the stock may place strains upon the barrel which will interfere with the normal muzzle-flip and vibration, causing shifting zeroes. However, trouble from this source is rare. The arsenals now so thoroughly impregnate the stocks with linseed oil that warping seldom occurs, although the Rifle Team of 1924 had a great deal of trouble with warped stocks. When new rifles are issued, it is advisable to rub linseed oil (boiled or raw) or linseed oil and turpentine into the stocks for about ten minutes a day for a week and thereafter for about the same time once a month.

Inspection should be made daily wherever possible. Specialists, who do not normally fall out for troop, should have their rifles inspected at least once a week. Many a good rifle has gone to pot because a cook or some other type of specialist stood no inspection for weeks at a time.

Although I have limited my subject to ordinary service rifles, it might be well to add that the cleaning of automatic rifles, machine guns and pistols is the same with but one exception: the gas ports, gas chamber and all other places where the gas gathers must be cleaned in the same manner as the barrel.

Before leaving the subject of cleaning attention should be called to the fact that many a rifle has been ruined by being packed in grease and placed in storage before it was thoroughly cleaned. Unclean rifles will rust after being placed in storage no matter how much grease has been spread over them. Experiments have shown that air penetrates grease and oil. If the metal beneath has not been thoroughly cleansed of primer salts, rust may start when the air gets to them. The best safeguard against this destructive action is a thorough cleaning with ammonia dope before the rifle is greased and packed for storage. In 1919, when we received our special star gauge rifles, we ammonia-doped one of them for some unknown reason. Much to our surprise we observed the fouling reaction. The rest were then doped with the same result. Naturally, before being shipped they had been targeted, but apparently through some error had not been thoroughly cleaned. If they had been stored long enough in that state, they would undoubtedly have developed rust.

It is simple enough to inspect a rifle for cleanliness and to teach others to do it properly, but inspection which will reveal the serviceability of the rifle is another matter. Naturally the question is always arising, and someone is always passing it on for some one else to decide. Some years ago



such a problem was passed to me, in the case of several rifles; and I was unable to pass it further on. I could not shoot the rifles in question to determine their accuracy. I had to make my decision through other means. I dug into many books but none of them told me how to decide whether or not a rifle should be withdrawn from service. The books told me how to select from a group of good rifles the best for the use of a rifle team—but that was all. Even today there is little to be read on this subject, and I somehow feel that in dealing with it here I may be rushing in “where angels fear to tread.” However, the matter is too important to be passed by through fear of controversy.

It is safe to say that there is not enough knowledge among us on the subject of selecting out bad rifles by inspection. However, such knowledge is necessary if we are to avoid equipping troops with inaccurate rifles, and it is of incalculable value in time of war. In time of peace lack of such knowledge reduces efficiency in that it allows men to train with inaccurate rifles. Such training is wasted, for the man himself sees no good result. Money spent for ammunition fired in such faulty range training is wasted. There is also another form of waste which is directly caused by the inability of some officers to tell a good rifle from a bad one. At the Depot of Supplies rifles are frequently received marked unserviceable which are absolutely fit for use. Add the expense of shipping these weapons and the cost of testing them to the possibility of ruining them through improper preparation for shipment and you have a wastage that cannot be ignored. An examination of 1,000 rifles sent to the Depot as unserviceable revealed the fact that 15 per cent. of them were fit for use. This shows conclusively that something was wrong with the judgment of the officers who inspected them.

If a rifle will shoot accurately it is serviceable. But what constitutes accuracy? As a general proposition it may be said that a rifle should shoot straight enough for a man to make the grade of expert on the range; hit a man ten times in ten at 300 yards; for a good shot to make 44 at 600, 45 at 500 and 46 at 300.

The accuracy of a rifle barrel is lowered by pits in the surface of the bore (in other words, rust) by corrosion or wear and by “bulges”. The three ways of testing the accuracy of a barrel are by the use of gauges, by visual inspection and by test shooting. To test by gauges one must have head-space gauges and bore gauges which are too costly to be issued to the service generally. Then, gauges do not always tell the whole story; certain of the results obtained through their use involve test firing for further confirmation. While on the subject of gauges I should like to spike a practice which seems to be spreading. I refer to the method of gauging the muzzle by sticking a cartridge into it on the theory that if the bullet can be inserted up to the brass or within less than a quarter inch of it, the rifle is unserviceable. This is not a real test in itself. As employed in the past by experts it

was intended merely as a preliminary measure which would place a rifle under suspicion; but no rifle should be condemned after this test alone. It has always been intended that this bullet test shall be followed by a final firing test. If the muzzle is uniformly belled the accuracy of a rifle will not be affected. Naturally a belled muzzle creates the fear that the rifle will not fire accurately and also that there may be other defects in addition to the belling. In time of peace a belled muzzle should always be test-fired. In time of war, if there is no chance to test-fire, all belled rifles should be replaced.

The real proof of the pudding is in the eating, and to my mind firing is the best test of accuracy. I have seen rifles which by means of every known visual test could apparently be condemned at a glance, yet when test-fired these same rifles proved to be accurate. Therefore, whenever possible, every rifle which is regarded with suspicion should be test-fired. Before test firing the rifle should be thoroughly cleaned and all metal fouling should be removed. Test firing is usually carried out in one of two ways:—by firing the piece from the ordinary prone position or with the aid of a muzzle rest. In both cases, however, the rifle must be in the hands of a good shot or the test is without value. And by a good shot I do not mean merely a man who has made expert once. The firer should be one who is known to be a good consistent shooter. Furthermore, if he has done no firing for several months, he should, if possible, fire fifty or sixty cartridges to get back into correct firing habits before he starts the test. If this is not done good rifles may be condemned when the apparent inaccuracy is the fault of the firer and not of the rifle. Fifty-five per cent. of those qualified as expert riflemen will shoot only sharpshooter on their first sixty shots if several months have elapsed since they last fired. When using the muzzle rest, those in charge of the test must be sure that the position of the rifle is the same for every shot; otherwise the results will not be accurate. Tests should be held under the best light conditions and when there is no wind, if possible. When they must be held in the wind, they should be run off while the wind is blowing steadily. Small streamers should be set up at every hundred yards in order that the observers may keep track of the wind. A good man should assist the firer in watching the wind conditions.

Test ammunition should be that which has been proven to be good, and all that is used in any test should be from the same lot. Much of the ammunition left over from the War is of little value for tests, and if poor ammunition is used good rifles are likely to be condemned. Only the best available ammunition should be employed. Headquarters has recently purchased some excellent ammunition which has been sent to certain of the larger posts. Where this is available, nothing else should be used for tests. If war ammunition alone is at hand, then only those lots should be fired which will permit a good shot to make 46 or better at 300 prone, using an A target, or 47 or better at 500, using a B target. The testing should be

done at 300 yards, if possible; and three groups of ten shots each should be fired.

It should be remembered that during the firing no change should be made in the sight setting. Once the first shot is fired the rifleman's object is to get a group—not a score. If the average mean radius is greater than 6.5 inches, the rifle should be condemned. The mean radius is determined as follows: Draw a perpendicular line through the extreme left shot of the group, and at right angles to it draw another line through the lowest shot of the group. Find the average distance of each shot in the group from the perpendicular line, and at this distance draw a second perpendicular line through the shot group. Find the average distance of each shot from the horizontal line and at this distance draw a second horizontal line through the group. The intersection of these two lines is the center of the shot group. The average of the distance of all shots from the center of the group is the mean radius of that group. If for any reason the firing cannot be done at 300 yards, the test may be made at 200 if all groups of over 4.5 are rejected. At 600 yards the standard group is 13 inches.

Test firing, with but one exception, is the result of suspicion aroused by visual inspection of a rifle. The exception is encountered during target practice when a known good shot fails to make the scores of which he is capable or when the scores of some other man suddenly fall off. However, such results should be regarded with caution. Usually the trouble is with the man, not the rifle. While shooting a man becomes as temperamental as a grand opera star. On several occasions I have seen a member of the Marine team turn in a new rifle a week after receiving it with the complaint that it was no good, that it would not group and true, and that as a result, his scores had dropped. As soon as another new rifle was issued to him the same man would go right back into form. Later the very rifle of which he had complained would be used by some other man, who knew nothing of its alleged faults, with fine results.

The reader has probably noticed that so far I have avoided the issue of visual inspection. I must admit that I approach the subject with some trepidation; for it is difficult to lay down hard and fast rules which will cover all cases where one is justified in condemning a rifle after visual inspection alone. To illustrate my reluctance to state any general rules I can do no better than describe an incident which occurred during the progress of an experiment, where we used a rifle which had an open crack three inches long extending down the barrel from the muzzle. A blind man with a sense of touch would have been justified in condemning this rifle, yet—strange to say—three men qualified as experts with it. Naturally no such weapon would ever be retained in service, but the incident shows how indefinite are the results obtained solely through visual inspection.

When inspecting a rifle for erosion, bulges and pits in the barrel, it is

hardly necessary to remind the reader that the bore must be absolutely free from grease and dirt. When this has been accomplished examine the bore from both muzzle and breach. First look for bulges, which will usually appear as dark rings extending about half way around the circumference of the bore, and about  $\frac{3}{8}$  of an inch wide. These are signs that there has been an expansion of the metal wherever such rings appear. Bulges are usually caused by some slight obstruction in the bore, such as a wad of grease or a cleaning patch, when the rifle is fired. If an apparent bulge is present, examine the outside of the barrel at the same point where the metal may show a swelling or perhaps a slight crack. Either of these external signs confirms the presence of a bulge. However, a bulge may exist without revealing itself on the outside to an extent that will make it visible to the eye. If it is possible to reach the apparent bulge in the bore, it should be scratched with a sharp instrument. At the Depot of Supplies we have sawed rifles in two, after they had been condemned for bulges, and discovered that the alleged bulge was nothing more than some kind of hard "goo" sticking to the barrel. All barrels with bulges should be condemned.

After inspecting for bulges, look for pits. Pits are old rust holes and are ideal spots for the growth of more rust. New rust will stick up above the surface of the metal with a "fuzzy" appearance, whereas the pits—the places where the rust has eaten in—will show as pinhead pockmarks. Pits in themselves do not condemn a rifle, providing the lands are uniformly sharp and distinct; but if the sharpness of the lands is generally affected, the rifle should be condemned. If one or more pits have eaten across a land or groove with a width of  $\frac{3}{8}$  of an inch or more, the rifle should be condemned. Bulges and pits of the sort just described permit the gas to escape around the bullet in an irregular manner, which means erratic bullet flight.

A rifle will sometimes be discovered in which the lands are worn away for an inch or more from the breach end. This is frequently referred to as erosion. If it extends for more than an inch forward of the breech, the rifle should be condemned.

Again let me emphasize the fact that it is impossible to lay down rules of visual inspection for the condemnation of rifles which will absolutely fit every case. In making such inspections look for the things that have been described, and in coming to a conclusion be guided by the question: Will this defect permit gas to escape ahead of the bullet? If all the known signs point to such a condition the rifle should be condemned. Remembering that the best test is firing, mark the rifles which you condemn for test firing at the first opportunity. By comparing the results of your visual inspection with those obtained from test firing you will confirm your diagnosis or discover any weakness in your method of visual inspection. In any event you will improve your power of judgment. I know of one officer who condemned every rifle in his company without test firing. Investigation showed that all of them were not unfit for use, yet with no test firing the



officer who condemned them learned nothing that would increase the accuracy of his judgment in the future.

It is possible that in the future the problem of rust may be eliminated through the use of a different barrel steel, such as stainless steel or the discovery of a new primer composition or powder. One large ammunition company already claims that its new .22 calibre cartridge has a primer that will not set up rust when left in the barrel. But until the ideal metal, powder and primer are discovered, we shall have to maintain a constant guard against rust—the arch enemy of all firearms.

As I reach the end of this article I am not at all sure that I have shown the average officer anything he does not already know. However, if I have brought home to him or anyone the waste of money and loss of efficiency caused by the poor care of rifles and the realization that proper attention will remedy the existing conditions, I shall feel amply repaid for the effort.



## A HOME BUILDER

(The Battle of Noveleta and Service in Cavite, P. I., 1899-1900)

By COLONEL H. C. REISINGER, U.S.M.C.

**A**FTER General Elliott's service on the U. S. S. BALTIMORE, during which he marched with the Marine detachment from Chemulpo to Seoul, Korea, and later made the landing at Port Arthur (incidents related in the last two issues of the MARINE CORPS GAZETTE), he spent the next three years ashore in the United States. In April 1898 he formed part of the Marine Battalion that was landed at Guantanamo and subsequently, on July 14, 1898, commanded the Marine detachment that destroyed the well at Cruzco after a lively fight against a very large force of Spanish troops. The General never had a yarn to spin about the Guantanamo service for that service was strictly military and involved no outside incident around which his stories usually are formed.

The General always considered himself as an exceedingly lucky man to have had command of the Marines in the Guantanamo fight. As he puts it: "It was only the fact that Huntington was sick that morning that gave command of this detachment to me. It was a mighty lucky incident in my life and had much bearing on my later career." For his eminent and conspicuous conduct in this engagement at the Cruzco Well at Guantanamo, General Elliott (then Captain), was advanced three numbers on the list of Captains in the Marine Corps by Congressional resolution.

After his return to the United States, and a rest of less than a year, he received orders on August 4, 1899, to command the Second Battalion of Marines for duty in the Philippines. He was then a Major, and in September was promoted to the rank of Lieutenant Colonel.

It will be interesting to note, before beginning this narrative, who accompanied the General as officers of the Second Battalion. The records show the following:

### Company "A"—

Commanding, Captain Thos. S. Borden  
1st Lt. R. F. Wynne  
1st Lt. W. G. Powell  
1st Lt. J. W. Lynch

### Company "B"—

Commanding, 1st Lt. D. D. Porter  
1st Lt. J. H. A. Day  
1st Lt. T. F. Lyons

## Company "C"—

Commanding, 1st Lt. R. C. Berkeley  
1st Lt. J. T. Bootes  
1st Lt. B. B. Woog

## Company "D"—

Commanding, 1st Lt. P. S. Brown  
1st Lt. E. E. West  
1st Lt. A. E. Harding

Battalion Adjutant: 2nd Lt. L. M. Harding

The First Battalion of Marines, which had preceded the Second to the Philippine Islands, was later organized with the Second Battalion into the First Brigade and Lieutenant Colonel Elliott, being the senior officer, was placed in command. The organization of the First Brigade was as follows (those who participated in the Noveleta engagement on October 8, 1899, are marked by asterisks):

*1st Battalion—1st Brigade*

## Company "A"—

Commanding Officer, Captain Chas. G. Long, USMC  
1st Lt. Geo. C. Reid, USMC  
1st Lt. J. T. Bootes, USMC\*\*

## Company "B"—

Commanding Officer, Captain A. R. Davis, USMC\*\*  
1st Lt. R. M. Gilson, USMC\*\*  
1st Lt. B. B. Woog, USMC\*\*  
1st Sgt. James Murphy, USMC\*\*  
Sgt. William Montair, USMC\*\*  
Sgt. San Jose Fralick, USMC\*\*  
Sgt. Henry Hill, USMC\*\*

## Company "C"—

Commanding Officer, 1st Lt. David D. Porter, USMC\*\*  
1st Lt. J. W. Lynch, USMC\*\*  
Gy. Sgt. Geo. Heiligenstein, USMC\*\*  
who was Acting 1st Sgt. at battle  
of Noveleta.  
Sgt. Patrick Kelly, USMC\*\*  
Sgt. Walton L. Jenness, USMC\*\*  
Sgt. Reinhold Anderberg, USMC\*\*  
Sgt. Harry Harvey, USMC\*\*

## Company "D"—

Commanding Officer, 1st Lt. H. O. Bisset, USMC  
1st Lt. Robert F. Wynne  
1st Lt. W. J. Powell

*2nd Battalion,—1st Brigade*

## Company "A"—

Commanding Officer, Capt. H. C. Haines, USMC\*\*

1st to 6th of October, 1899, after which period Captain Haines' muster roll shows him as Commanding Officer of the 1st Battalion and "commanding Battalion at Noveleta."

1st Lt. Smedley D. Butler, USMC\*\*

in command of Company at battle of Noveleta.

1st Lt. E. E. West, USMC

1st Sgt. Aleck McKinnon, USMC\*\*

Sgt. Gustave C. Hoens, USMC\*\*

Sgt. Chas. F. Tirrell, USMC\*\*

Sgt. John Hoffman, USMC\*\*

Sgt. Frank Frazier, USMC\*\*

## Company "B"—

Commanding Officer, Captain B. H. Fuller, USMC\*\*

commanded battalion at battle of Noveleta.

1st Lt. C. S. Hill, USMC\*\*

1st Lt. J. H. A. Day, USMC\*\*

1st Sgt. John W. Boyd, USMC\*\*

Sgt. Fred W. Winters, USMC\*\*

Sgt. Geo. W. Gorman, USMC\*\*

Sgt. Jacob Weidmann, USMC\*\*

Sgt. Alexander Foley, USMC\*\*

## Company "C"—

Commanding Officer, Captain T. S. Borden, USMC\*

1st Lt. A. E. Harding, USMC\*\*

Gy. Sgt. F. O. Stoll, USMC\*\*

Sgt. James Gallivan, USMC\*\*

Sgt. Jackson Stevens, USMC\*\*

## Company "D"—

Commanding Officer, 1st Lt. Geo. C. Thorpe, USMC\*\*

1st Lt. Thos. F. Lyons, USMC

1st Lt. Geo. Van Orden, USMC\*\*

Gy. Sgt. John L. Bastian, USMC\*\*

Sgt. Charles L. Dow, USMC\*\*

Sgt. James E. Beasley, USMC\*\*

Sgt. Byron E. Credle, USMC\*\*

Lt. Lyons was Acting Battalion Adjutant October 8th to 25th, 1899.

Captain W. B. Lemly, USMC, Brigade Quartermaster

1st Lt. Henry Leonard, Brigade Adjutant and Provost Judge\*\*

2nd Lt. L. M. Harding, USMC, Adjutant, First Battalion\*\*  
1st Lt. R. H. Dunlap, USMC, Adjutant, Second Battalion  
Asst. Surgeon C. D. Langhorne, USN, Medical Officer, Cavite District\*\*  
Asst. Surgeon B. L. Wright, USN, Medical Officer, Outposts

The second fight that General Elliott refers to in this story occurred practically on the same ground as the first Battle of Noveleta. The Insurrecto force, after the first skirmish, reoccupied practically the same trenches that were held during the first battle. However, the bridge had been rebuilt and the approaches were somewhat better.

The officers station at the outposts at this time were:

Captain T. S. Borden, Commanding  
1st Lt. David D. Porter  
1st Lt. William H. Clifford  
2nd Lt. L. McC. Little  
2nd Lt. Stephen Elliott  
2nd Lt. J. H. A. Day  
Dr. Plummer, Naval Medical Officer

The fight was a running fight from Cavite Viejo to Rosario, where the Insurrecto force disintegrated. As was customary in those days when the fight went against the Filipino, he hid his arms and became a "buen amigo." You could not pick your old antagonist from among the peaceful citizens of a town.

The General told me this story one night months ago and it particularly impressed me because it revolves around a woman of extremely unprepossessing appearance who contained within her homely exterior those maternal and home-building instincts that are so beautiful in woman. She had suffered much from lack of education, although of good birth, and therefore rated this quality as most desirable in others. Her husband appears to have been a thoroughly shiftless little man who had no qualities to recommend him to the general public. But to this woman, the fact that he was "a educated man and a bookkeeper," out-weighed his many manifest deficiencies. For obvious reasons the names of these two persons as here given are fictitious, but many officers who served in Cavite at that time undoubtedly recognize the lady.

Incident to the story as told by the General is the Battle of Noveleta, one of the liveliest little scraps that the Marine Corps has experienced. In it the Marines accomplished a feat that the Spaniards had found impossible—that is, of dislodging an armed rebel force from the position they then occupied. This feat is best expressed in the language of Admiral Watson in his cablegram of October 10, 1899, describing this engagement:

"Elliott's advance to Ellemott effected junction with Schwan, having accomplished most difficult task highly creditable manner period Spaniards found Noveleta impregnable; once lost entire regiment there \* \* \*"

The following is the General's story:

"Early in August 1899, while I was stationed at the old Marine Barracks here in Washington, I received orders to command a battalion which was forming in New York for service in the Philippines. This battalion was organized by drafts from almost all of the East Coast yards, and when we got them together they were a fine husky bunch of youngsters, most of whom were volunteers for this duty. We left Jersey City by special train for Frisco and there, about the middle of the month, I believe, we embarked on the CITY OF SYDNEY, the old Pacific Mailer. It took us better than a month to make the trip out and after arrival in Manila Bay we landed the last of September in the middle of a three-day typhoon. I never saw such terrific rains in all my life and my command was wet, weary and bedraggled by the time we were under cover. We were quartered in a building which had been occupied by the Inspector General of the Spanish army and through the efforts of Major McCawley it had been placed in an excellent condition for barracks. Colonel Pope was in command of the marines in Cavite at this time and had with him the First Battalion under Major Spicer. They had arrived some time in May. Later on the First and Second Battalions were organized into the First Brigade of Marines and we took over from the Army the control of the Navy Yard and the Cavite peninsula.

"About this time of my life it seems that I was destined to profit by someone else's misfortune. For the second time I fell into the command of an organization just prior to a fight. When I arrived in Cavite Colonel Pope was in ill health. Early in October, with the typhoon season an unpleasant memory, the newly organized First Brigade fought the battle of Noveleta. By this time, of course, Aguinaldo had come out in his true colors and was the principal leader in the rebellion against the United States. He took to the bosque and became very troublesome all along "The Line." With the coming of the dry season the Army undertook an aggressive campaign against him and a part in this operation was allotted to the First Brigade of Marines.

"By direction of Admiral Watson I had a conference with General Grant at Bacor and a concerted attack was planned upon Cavite Viejo. Our part in this operation was to strike at the rebel forces at Noveleta and cut the line of retreat of the main force and to form a junction with the Army. The

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(Note: The word "Ellemott" appearing above, is as it appears in the Major General Commandant's report to the Secretary of the Navy in 1900. It possibly has code significance as it does not appear to be the name of any locality in the vicinity of Noveleta.



PETREL, under command of Captain Cornwall, was to assist us by fire while lying off Caridad.

"Well, I got all our plans fixed up and early on a Sunday morning, the 8th of October, we started out and soon ran into a regular hornet's nest with the odds all in favor of the hornets. I had about 350 men with me organized into two small battalions under command of Fuller and Haines. As volunteer aides, Lieutenant Crosley of the Navy, an officer of the 16th Infantry, and Dr. Langhorne, came along with me. The fight that followed that hot morning—my, it was hot and sultry—is pretty well known throughout the Corps.

"The insurrectos had taken up a very strong position with a small river in their front and a line of entrenchments that extended on either side of an old blockhouse. Flores, a private in my command, who was born in Bacor, knew this position well. He told me that the Spaniards had tried to take it several times but had always got a licking. Flores' father had been a "Commandante" in the Spanish army. The boy worked his way to the States and eventually enlisted in the Marine Corps. The ground was very rough. After passing the causeway beyond our outposts there was a heavy thicket of bamboo and thorn trees, with only a single road about six feet wide through low, marshy ground, intersected by tidewater runs. Some of this ground was then, or had been, used for rice paddies. It was all, more or less flooded and semi-liquid mud. Beyond this marshy ground, there were thickets of bamboo and trees that afforded excellent cover at short range for flanking fire, and the Filipinos didn't overlook this advantage.

"We got first a heavy fire from the chaparral on our left. While this fire was returned, the men pushed ahead at double time to clear the causeway and extend, still under heavy fire, in the cleared spaces of the swamps and rice paddies. Here the men and officers displayed a fine determination and discipline, and a very gallant spirit. We got it from front and both flanks. We received considerable support from the fire of the PETREL, but of course as we advanced this fire had ceased. When we reached a point about 250 yards from the enemy trenches, we found a small dike, and here the men had a chance to reform and get a "blow" before pushing forward. The advance thus far had been terribly exhausting—about 50 men were overcome by heat and exertion—but nevertheless, in response to their officer's command, the men quit this shelter and advanced in silence across the intervening space, wallowing around in mud up to their waists part of the time. And this in the face of a very heavy fire. The right of the advance was the first across the stream, being gallantly led over the ruins of a bridge by their officers. The Filipinos finally broke before the grim determination of our men and we captured that position, destroying the block-house.

"In addition to the men who were knocked out by the heat, we lost one who was killed outright, and two who subsequently died of their wounds. We

also had a number of wounded, but even with these regrettable casualties we got off pretty well.

"After the scrap at Noveleta, things settled down for a while. Colonel Pope was invalided home and I fell into his duty and tried my hand at being Military Governor of Cavite. The weather was fine, the command comfortably housed, and pretty generally it was first-class duty. Every now and then there would be trouble at the outposts around Dalahican, but this didn't amount to much more than to kick up enough excitement to keep us on edge.

"Shortly after Cavite had been taken over by the United States the Navy Yard shops had started to work. The Spaniards had left the machinery in pretty good shape and with a little work things were soon humming.

"The opening of the Navy Yard had provided employment for many native artisans and mechanics. The wages paid by us were far in excess of the Spanish scale and a new era of prosperity hit the town. This prosperity and the presence of the garrison produced a brisk trade between Manila and Cavite in a native spirit called 'bino,' a distillation made from the aloe tree. It has a 'kick' that is deadly sometimes. While the Filipinos drink but a thimbleful of 'bino' at a time our men would drink it by the glass. While the Filipino got a fairly lively reaction from this liquor our men became maniacs under its influence, writhing, kicking, jumping, and throwing themselves on the ground. The after-effects of a 'bino drunk' were a serious detriment to the men both mentally and physically. Well, we had to stop this traffic at once and a special squad of marines was assigned to the job. They paid particular attention to the boat traffic between Manila and Cavite as it was suspected—and afterwards proved to be a fact—that most of this liquor was being brought in by Chinamen from Manila.

"One day about one o'clock I walked down through the Navy Yard to see the Manila boat come in and to observe the work of my 'bino' squad. On my way I saw a half dozen native boys throwing coppers at a line. They would stand off about six feet and cast at a line drawn on the ground, the one casting nearest being the winner. The winner took all. Watching the game, I notice a miserable little beachcomber I had seen about Cavite. He had been in one of the Western volunteer regiments and when his outfit was sent home he had taken his discharge and remained in the Islands. Quite a number of the volunteers did this and many of them that remained after their regiments left became very prominent in the civil government and in business affairs of the Islands. The man I speak of, however, was not of this type. He was little, thin, furtive, and dirty; he sidled crab-fashion when he walked. How he lived I don't know, but for some time I had observed him going steadily down grade. As I came along I saw this man put his foot down on two of the 'clackers' that had rolled near him, pick them up and put them in his pocket. The boys gathered around looking savagely at him but said

nothing. I walked up and made him disgorge the money and then gave him a heart-to-heart talk in which I threatened to expel him from the Yard if he didn't take a brace on himself. I guess I was pretty rough as I was thoroughly disgusted. It wasn't necessary for any white man to sink so low—there was plenty of work to be had for the asking, both in Manila and in Cavite. I was to find out later on that this specimen had a holy horror of work in any form.

"Well, having finished with my beachcomber, I went on down to the waterfront. When I came to the dock the boat had just made fast and the usual swarm of Chinos and Filipinos were crowding down the gangway. In the midst of this throng my eyes suddenly caught the most remarkable looking woman I had ever seen. She was stalking through the crowd, tall and gaunt, towering above the natives, arrayed in a woolen dress with a maroon woolen shawl drawn tightly about her thin shoulders. On her head she wore a little black hat ornamented by an upstanding green parrot which, though deceased, was startlingly lifelike. Under one arm, and partly beneath the shawl, I saw as she came close to me a little Italian greyhound which, despite the heat of the day, was shivering so that his teeth chattered. This woman had light gray eyes that were crossed—I never could tell with any certainty what she was looking at—a grim line for a mouth, and a face that was bronzed by much exposure and deeply seamed. She had the look of a pioneer and she carried herself like a drum major.

"Just after she passed me I heard a voice squeak, 'My God, how did you get here?'

"I turned quickly and heard her reply, 'I come on my feet. Did you reckon I flew?'

"She was talking to the little beachcomber—he must have drifted along behind me after that 'dressing down' I'd given him. She stood over him, formidable, domineering, but not unkindly. As far as I could judge this was all their greeting after months of separation. Without more ado, she took the little man firmly by the shoulders and marched him out of the Navy Yard into the heart of the village. That was all I saw of those two that day.

"Well, the next morning at office hours there was ushered in a family of Filipinos. The grandmother, mother, two grown girls, two or three small children, all came in. It was one of my duties to hear and settle, in some way, all the complaints of the natives, and it was not an easy matter generally. Through my interpreter, the marine named Flores that I spoke of, I was told a very pitiful story. This family of Filipinos stated that they and their people had lived in their house in Cavite for three hundred years. The house was old and had been rented by them from the Dominicans during this period. They complained that an American woman, whose name they said was Dryden (I'll call her that though it isn't her real name), had come to their house that morning and informed them that they were to move out at once

as she wanted it for herself. They had demurred. With the assistance of some marines who were with her, she had proceeded without more words to bring her own belongings into the house and put their out on the sidewalk. When I heard this complaint I sent a sergeant to the house with instructions to bring this woman to the office. She came, and to my surprise I saw that it was the woman of the maroon shawl and the shivering greyhound. She stood before my desk, stern and forbidding looking, those grey eyes shining determinedly—you could never tell just where they were looking.

"‘Mrs. Dryden,’ I said to her, ‘what did you come to Cavite for?’

"‘I came to look for Dryden,’ she replied.

"‘Is this man, Dryden, your husband?’ I asked.

"‘He is,’ she answered, ‘and I want my husband.’

"‘Where did you come from?’ I asked her.

"‘I come from Gila, Arizona.’

"‘Did you come all the way from Gila, Arizona, by yourself?’ I asked her.

"‘Who do you reckon would have brought me?’ she answered. ‘I come to find Dryden and to make a home for him.’

"I remembered that Gila, Arizona, was reputed to be one of the hottest places on earth and so I got some understanding of how any person could wear a woolen shawl in Cavite even during the cool season; and of that eternally shivering greyhound.

"Further questioning on my part developed that this woman came from a fine New England family and that her father was first cousin to one of our most prominent early New Englanders. This father, for reasons known only to himself, started west in the early days, and as civilization came on he moved farther west. He had no home for any length of time in any one place and finally brought up in Gila, Arizona, where he gave up the race with civilization and died.

"‘What do you expect to do here in Cavite, Mrs. Dryden?’ I asked.

"‘I came to see if I could ‘jawbone’ the boys and to look out for Dryden.’

"‘Now, Mrs. Dryden,’ I said, ‘you cannot sell liquor here.’

"She bridled. ‘Selling licker, Gin’ral, is agin my principles. I would not sell licker to no man,’ she said. ‘I propose to sell the boys soft stuff, cigarettes and tobacccy, and to give Dryden a home.’

"I called her attention to the fact that I was not a ‘Gin’ral’ but she stuck to it and after two or three attempts to correct her I gave it up. During my stay in Cavite I was ‘Gin’ral’ to Mrs. Dryden.

"Then I turned to the business in hand—that of the dispossession of this Filipino family.



"'Look here,' I said, 'don't you know that you can't come here and turn people out of their houses?'"

"She glared at me in disbelief. "Ain't them the Philistines, Gin'ral?" she said.

"What do you mean, Mrs. Dryden, about these people being the Philistines?"

"Her mouth became very grim and she said, 'Ain't them the Philistines, I'd like to know.'"

"'No, Madam,' I replied, beginning to get some light. 'You have made a mistake. These people are Filipinos and they are our 'little brown brothers.'"

"She looked at me disdainfully. 'They ain't no brothers of mine,' she answered fiercely.

"That remark afterwards went into the history of American occupation of the Philippines. In a day it was all over Cavite. My lady from Gila had coined a phrase that even found its way into a popular song of those days.

"It was but natural that I should take an interest in this rather remarkable woman. Her absorbing desire to follow the shiftless Dryden wherever he might roam and to build for him a home aroused my compassion and I really wanted to help her out. I went out to the house of the evicted Filipinos and saw that they were restored to possession. From the looks of this place, when the Sergeant summoned Mrs. Dryden from her labors, I must have interrupted the first good cleaning that the old house had experienced in at least a hundred years. Then I went around with Mrs. Dryden to see if I could find a vacant house suitable to her purpose. As there were at that time some three hundred houses without occupants, which she could have for nothing until their owners returned, we did not have much trouble in locating her.

"I used to walk about the village in the evening to inspect it. Within a day or two I found that Mrs. Dryden had set up a bar and was selling to the men soft drinks, cigarettes and tobacco. The house was on the shady side of the street in the afternoon. The front was swept clean and little tables and stools were put out before her canteen and later on she added a number of comfortable chairs. In a short time some of the best of our men and most of the music boys patronized the place, and as she was a stern disciplinarian and allowed nothing unseemly to happen within her canteen, she became a great help in maintaining the morale of the command.

"Mrs. Dryden had a way of accumulating everything that was loose, and some things that were not. Pretty soon she had mustered a large flock of goats and practically cornered the supply of fresh milk. Whenever we wanted fresh milk for the diet of sick men we could always count on Mrs. Dryden's herd of goats. In some mysterious way she formed business con-



nections so that there was hardly anything that was needed for comfort that she could not find means of producing. Many of the officers who served in Cavite at this time will undoubtedly remember her and the flourishing business that she soon built up.

"I have often wondered what the Marine of today would think of our life in the Philippines in those days. We had no moving pictures for entertainment, our ration was scant, and our uniform clothing not adapted to the climate. After the routine for the day was over there was but little for the men to do to amuse themselves. Under such circumstances it can be readily seen what an excellent influence a place like Mrs. Dryden's could become.

"We had a large officers' mess in the Cavite garrison and we often longed for something in the way of vegetables other than the potatoes, onions, and canned tomatoes then available. I had brought with me when I came to the Philippines a large stock of garden seed. It was turned over by the Bureau of Agriculture for experimentation. In my evening walks about the village I never saw Dryden doing anything other than sitting before their canteen in a chair tilted against the house, and one day I conceived the idea of giving Dryden an occupation and at the same time providing our mess with fresh vegetables. I spoke to Mrs. Dryden about it, suggesting that I turn over the seed to her and that Dryden take charge of the raising of these vegetables. I got a very good idea of her estimate of Dryden at that time for she put her hands on her hips and glared at me and said, 'Why, Gin'ral, Dryden? He is a bookkeeper, he's a' eddicated man. He would not have no truck with raising a garden.'

"After that I quit trying to find work for the 'edicated' Dryden, and he continued to do nothing but 'keep the books' of his wife's business.

"One morning at daylight a man galloped in and reported that our outpost at Dalahican, about five miles from Cavite, had been attacked by some of Aguinaldo's people. We had 250 men out there. The call to arms was sounded at once and we started off, about three hundred strong, to their relief. When we got out there there was a lively fight going on over the old ground of the Noveleta battle. There was a whole lot of noise but no great amount of damage for the Insurrectos did not stand up to the fight as they had in the first instance. Our force dispersed them without much difficulty. There were three or four men wounded, and when the fight was over the question of moving them was a serious one. We had nothing in the way of an ambulance; it was a long way back to the station and it would be slow business to carry them. With one or two officers I was trying to solve this problem when I was astounded to see in the rice field nearby a large gilt coach, drawn by three ponies. I went over to it and found Mrs. Dryden in charge with a Filipino boy who worked for her on the box. The coach had evidently belonged to one of the wealthy families in the days of the Spanish regime.

It was lined inside with faded yellow satin, much stained by reason of chickens having used it for a roost, but the floor was thickly covered with grass. Mrs. Dryden was directing the placing of the wounded men in the coach. When they had been made as comfortable as possible she mounted the box and drove along the beach for some five miles back to Cavite, where she delivered the wounded to the hospital. Her voluntary action undoubtedly saved the lives of these men and was characteristic. Wherever that coach came from it is certain that Mrs. Dryden, knowing the probable need of 'her boys,' never waited long enough to obtain permission to use it. What she needed on a mission of that character she just took.

"One of our men wounded in this fight was a remarkable case. He had been shot through the head and where he lay on the ground I could see what appeared to be at least a teaspoonful of brains that had oozed out. He was carried back to Cavite almost dead and in the morning a grave was dug for him. Although he lost his sight, he actually recovered and lived here in Washington for some nineteen years after his wound.

"The day after the fight I sent for Mrs. Dryden and thanked her for her help in taking care of the wounded. I told her further that we were going to raise the outpost to three hundred men, and as it was a long way from town, and I didn't want the men to turn to "bino" for a stimulant, that I was going to place a canteen at the outpost and allow beer to be sold.

"She said she could not take the place and I asked her why.

" 'Well, Gin'ral,' she said, 'As I have told you before, it's agin my principles to sell lickin'.

" 'Well,' I said, 'then you can 'jawbone' the boys for soft drinks,' and she took the place on that basis.

"She went out to the outpost and established a very comfortable canteen which became the center of what little social life the men had there. She was there when I left the Island for home in March, 1900. I heard later that at the end of about two years she had made a great deal of money and had taken Dryden back to 'Arizony,' where they were living very comfortably on the proceeds of her adventure in the Philippines. Dryden, to his dying day, no doubt, spent what little energy he had on dodging a job appropriate for an 'edicated man and bookkeeper.' "



*Gooch's American Marines in the Attack on St. Lazar at Cartagena in 1741.*

## THE AMERICAN MARINES OF 1740-1742

By MAJOR EDWIN NORTH MCCLELLAN, U. S. M. C.

**H**ISTORIANS of the American Marines have called them Spottswood's Marines. Other American historians did not even know that they were Marines. Their correct name is *Gooch's Marines*. We will accept the statements of all the British Marines' historians that they were real Marines. Particularly that of Colonel C. Field who wrote two volumes of *Britain's Sea-Soldiers*.

They were the American Marines who wore the camlet (rough material, mixture of cotton and wool) coats, brown waistcoats and canvas trousers. There were thousands of them.

They served in Admiral Vernon's expedition against Cartagena in 1741.

Some of them served ashore during the War with Spain at Guantanamo Bay, Cuba, one hundred and fifty-seven years before Huntington's Marines landed there during our Spanish-American War. They also made the first visit of American Marines to Haiti—in the vicinity of Cape Tiberon.

One of these colonial American Marines became so friendly with Admiral Vernon that Mount Vernon on the Potomac received its name. He was Lawrence Washington, brother of George Washington and a Captain in "*Gooch's Marines*."

You can read all about this, and more, in a novel called *The Adventures of Roderick Random* (1748). Its author is Tobias Smollett who served on board a British ship at the time. He died in 1771 at Monte Novo, near Leghorn, Italy, where he was buried. Thirty-one years later, on October 14, 1802, Captain James McKnight (a brother-in-law of Stephen Decatur) was killed in a duel at Leghorn and interred there. Writing to Lieutenant-Colonel Commandant William Ward Burrows, about the death of his fellow Marine officer, Captain Daniel Carmick included the information that "he is deposited in the English Burial Ground where there are a great number of elegant monuments, among which is that of the famous Smollett."

### THE BRITISH MARINES

*Gooch's Marines* were part of the British Marines' organization. There have been sea-soldiers of Britain as far back as the Roman period. Captain Henry C. Cochrane wrote of these ancients in Hamersley's *Naval Cyclopaedia*, and Colonel Field gives detailed information on the subject. A study of history brings the student to the conclusion that whether a soldier is a Marine depends upon the character of duty such soldier performs and not upon whether he is actually called a *Marine*.

The year 1664 is assigned as the birth-year of the British Marines' organization. In 1713 came the Peace of Utrecht. This was the "signal for



the disbandment and breakup of the Marine establishment." Only four invalid companies were left to represent the gallant organization that had "done and suffered so much for its country."

War with Spain occurred in 1730. In his address to the House of Commons when he opened Parliament on November 15th of that year the King stated that he had "judged it proper that a body of Marines should be raised." In the following month an Order in Council decreed the formation of six Marine regiments. Increases followed, and among them were *Gooch's American Marines*.

#### THE KING ORDERS MARINES RAISED IN AMERICA

The records of correspondence between the British Home Office and the Admiralty (particularly Volumes 77, 83, 87, 88, 91, 92) contain much material about *Gooch's Marines*. An Order of January 5, 1740, (after stating that information of the War with Spain had been sent by the Duke of Newcastle to the Governors of "Massachusetts Bay, New Hampshire, New Jersey, New York, Virginia, North Carolina, Maryland, Pennsylvania, Connecticut and Rhode Island") continued:

"And His Grace signified His Majesty's pleasure to the said Governors, that they should forthwith make the proper dispositions for raising as many men as they should be able to procure within their Governments and as the King intended that the troops to be raised in America should be commanded by Colonel Spottswood, the whole, however, after they should have joined the Regular Troops under the command of Lord Cathcart, they should confer or correspond with Colonel Spottswood, if they had an opportunity, upon everything that might relate to the performance of this service."

On April 2, 1740, orders to the various Governors for raising troops in America "were signed." This force was "to consist of Companys of 100 men each including four Sergets, four Corporals, two Drummers, besides Comd. Officers, which were to be one Capt., two Lieuts., and an Ensign, His Majesty reserving to himself the nomination of the Field and Staff Officers and of one Lieut. for each Company, who would be men of experience in Service, and sent from hence for their assistance."

From *Cannon's Records* and the *Gentleman's Magazine* of 1741 we learn that the Field Officers and certain Subalterns of these American Marines were appointed by the King, and that their captains of companies were nominated by the American Provinces. "It was supposed that from climate, the natives of the American Continent were better calculated for the service upon which they were destined than Europeans." "Three Regiments of Foot", recorded the contemporary *Gentleman's Magazine*, "of a thousand men each, are raising with all speed in our American Colonies, and will consist of natives or of those enured to the climate. Their general rendezvous is to be at New York, where the Royal Standard is set up."

"The American Companies were chiefly raised by the interest and at the charge of their respective Captains, many of whom were members of the Assemblies in the Provinces where they resided; others lived upon their own plantations and had commands in the Militia. His Majesty was pleased to send to New York thirty young gentlemen, under the direction of Brigadier Blakeney, to serve in the Corps as Lieutenants; they had carried arms either in the Old Corps at Home, or in the Scotch regiments in the Dutch Service, and were most of them cadets of good families in North Britain."

Colonel Field wrote: "Early in 1741, three Marine Regiments were raised in New York, the command of the whole being entrusted to Colonel Spottswood of Virginia, Colonel Blakeney being appointed Adjt. General. This Colonial Force was not long afterwards formed into a single regiment of four battalions under the command of Colonel Gooch, and is generally referred to as *Gooch's Marines*, taking rank in the Army List as the 43d Regiment."

Hart in *Admirals of the Caribbean* sets the strength as follows: "Massachusetts (five companies); Rhode Island (two companies); Connecticut (two companies); New York (five companies); New Jersey (three companies); Pennsylvania (eight companies); Maryland (three companies); Virginia (four companies); North Carolina (four companies); Among other American officers was Colonel Laurence Washington."

#### SPOTTSWOOD COMMISSIONED AND RECEIVES ORDERS

Colonel Spottswood, on January 5, 1740, was informed that it was His Majesty's intention that the Troops to be raised in America should be commanded by him. He was therefore to cooperate with the several Governors for the better execution of His Majesty's orders. But if, on account of his health he should not be able to perform that service, he was to send these orders to the Lieutenant-Governor of Virginia (William Gooch), who was in that case to look upon them as directed to himself and to act accordingly with which the said Lieutenant-Governor was acquainted."

On April 2, 1740 a commission was signed "for Alexander Spottswood, Esqr., to be a Colonel of a Regt. of Foot to be raised in America for His Majesty's service, to consist of thirty Companys." Commissions were also signed for four majors, blank commissions for thirty captains, for sixty lieutenants, of which twenty-eight were in blank, for thirty ensigns in blank, and for four adjutants and a surgeon.

A letter dated "Whitehall, April 18, 1740," addressed to Admiral Vernon, stated that "directions have also been given for raising a considerable number of men in His Majesty's Colonies in N. America, which it is hoped will amount to 3,000 and are to be commanded by Colonel Spottswood whom His Majesty has been pleased on this occasion to make a Major General."

Alexander Spottswood, born in 1676, arrived in Virginia in 1710. He

served as Governor of Virginia from that year to 1723. In 1730 he was appointed Postmaster General of the Colonies. He appointed Benjamin Franklin postmaster for Pennsylvania. He died at Annapolis on June 7, 1740, as he was preparing to sail in command of the American forces to join Admiral Vernon. He was buried "on his estate of Temple Farm, near Yorktown, Va." In 1781 this mansion was known as the Moore House and in it the surrender of Cornwallis was negotiated. Major John Henley Higbee, U. S. M. C., was a descendent of Alexander Spottswode.

#### GOOCH SUCCEEDS SPOTTSWOOD

As provided in the King's orders of January 5, 1740, Colonel William Gooch, Lieutenant-Governor of Virginia, succeeded Alexander Spottswood in Command of the American forces.

Tyler wrote that "in 1740, on account of the unexpected death of Major-General Alexander Spottswood, Governor Gooch assumed command of the four Colonial battalions transported to join the British troops under Admiral Vernon." He was "absent about a year." Gooch "was seriously wounded, and contracted the fever from which many of the English troops died." Upon his return to Virginia, he resumed the government of the Colony. Colonel Gooch wrote that "it pleased Providence to wound me, and save my life, for if I had not been confined I verily believe I should have been numbered with those that died by sickness. I am still weak in my knees and very lame."

#### ADMIRAL VERNON WANTED MARINES

Admiral Vernon sailed for the West Indies some months before the re-establishment of the British Marines which has already been referred to. He sailed on July 23, 1739, and just before that date wrote to the Duke of Newcastle: "I could wish, indeed, we had each of us a company of regular troops sent on board of us, which would have strengthened us in numbers, as well as had their expertness in handling their arms, to have incited our seamen with the imitation of them. If we should come to a general war with France as well as Spain, I believe Your Grace will have already perceived the necessity there may be of converting most of our marching regiments into Marines."

#### AMERICAN MARINES JOIN VERNON

Ford in his "Admiral Vernon" wrote that the Admiral was joined by eight sail of transports, escorted by H. M. S. *Wolf*, in October of 1740, bringing land forces from North America.

In a letter dated November 10, 1740, written at Port Royal, Jamaica, to Barbadoes, Admiral Vernon stated that "Col. Gooch with ye forces rais'd in Virginia and Philadelphia is arrived here and we may reasonably expect every day those coming from New York with Col. Blakeney; and if Lord Cathcart (on Ogle's ships) be coming you must soonest hear of him to the windward."

## OGLE'S EXPEDITION SAILS FROM ENGLAND

In the meantime a reinforcing expedition under Sir Chaloner Ogle, had sailed in October, 1740, from England to join Vernon. Colomb wrote that Ogle sailed with a "considerable body of Marines and land-forces under Lord Cathcart." Field tells us that Ogle's vessels carried six regiments of British Marines and two regiments of foot. Ogle arrived at the Island of Dominica on December 19, 1740, according to Colomb who wrote that Cathcart died there. Field informs us that Lord Cathcart died of dysentery before the fleet reached Dominica, where it arrived January 3, 1741. General Wentworth succeeded Lord Cathcart in command of the land forces. Ogle came under Vernon's command when he arrived at Jamaica early in January, 1741.

## MORE ABOUT AMERICAN MARINES

Colonel Field contributes this information: "On arrival at Hispaniola, further reinforcements were embarked in the shape of two of the newly raised regiments of *American Marines* and a few other Colonial levies," to which the following note was added:

"The American regiments joined Vernon's Expedition in Jamaica on the 25th of February, 1741, probably from three to four thousand strong, but thanks to the climate more than to the bullets of the enemy, their casualties were such that on the 5th of October of the same year there were mustered 'Fit for Duty' only 210 Sergeants, 197 Corporals, 74 Drummers, and 1,610 rank and file."

On January 5, 1741, while at Jamaica, Admiral Vernon wrote to General Vernon:

"I was exceedingly surprised upon reading Captain Trevor's letter, that you had prevailed on him to give orders for the sick soldiers of the *American Regiment* being received into the Hospital for our seamen at Port Royal, an order, I conceive, neither he nor I can justify, bringing such a charge on the Navy, and which he may be liable to have charged to his wages."

On January 17, 1741, Admiral Vernon wrote General Wentworth as follows: "The *Experiment* designed for going with Lieut. Lowther, is ready for sea at any time, wanting only a supply of men, for which I have already acquainted you that the assistance of a Detachment of 30 Soldiers of the *American Regt.* (or from any other you shall think proper) will be wanted, which I must now desire you will be pleased to give orders for accordingly."

A Return dated February 14, 1741, of the "Officers and private men belonging to the Honorable Colonel Gooch's Regiment put on board the Fleet commanded by the Honorable Edward Vernon, Vice-Admiral and Commander-in-Chief in the West Indies," shows Gooch's Marines distributed as follows: The First Battalion in four ships: *Defiance* (2 officers, 48 men); *Suffolk* (5 officers, 165 men); *Falmouth* (no officers, 20 men); *Orford* (2



officers, 48 men). The Second Battalion in three ships; *Chichester* (4 officers, 135 men); *Rippon* (3 officers, 97 men); *Litchfield* (no officers, 10 men). The Third Battalion consisted of 11 officers and 334 men but no ships were shown. The Fourth Battalion in five ships: *Princess Caroline* (3 officers, 87 men); *Russell* (4 officers, 116 men); *Torbay* (3 officers, 87 men); *Princess Amelia* (4 officers, 113 men); *Montague* (2 officers, 58 men). This gives a total of 43 officers and 1,338 men.

However, regardless of the date of joining Vernon, these American Marines were with him when Cartagena was attacked.

#### VERNON SAILS FROM JAMAICA

"During the last week in January, 1741," the Fleet sailed from Port Royal, Jamaica. It made "*Cape Tiberon*, on the western extremity of *Hispaniola* (now the island of Haiti and Santo Domingo) on the seventh of February. After several days of careful reconnoitering to make certain whether or not the French Fleet had sailed for Europe as reported" Vernon anchored "in the bays near the Cape."

A Council of War, on February 16th, decided to make an attack on Cartagena. "On the 25th of February the fleet left for Cartagena" and on the fourth of March anchored "in *Plaza Grande Bay* between Cartagena and Point de Canoa."

Cartagena "was not unused to hostile demonstrations ending in capture. Sir Francis Drake had sacked it in 1585, while it was captured in 1697 by the French under de Pointis. In 1741 it was considered "the principal, the most populous, and the best fortified city in Spanish-America."

"The garrison of Cartagena consisted of 4,000 men; but to oppose this, the expedition contained land forces to the number of 12,000, and twenty-nine sail of the line, with a large proportion of frigates, containing in the whole 15,938 seamen," recorded Joseph Allen in his *Battles of the British Navy*.

#### THE DEFENSES OF CARTAGENA

"The entrance to Cartagena is six miles to the westward of the city, between two narrow peninsulas called *Tierra Bomba* and *Barradera*. This entrance is called *Boca Chica*, and is so narrow that only one ship can enter at the same time.

"On the side of *Tierra Bomba* was the square fort *St. Louis*, having four bastions, mounted with eighty-two guns and three mortars; to which was added *Fort St. Philip*, mounting seven guns, and *St. Jago* mounting fifteen guns; and a smaller battery of four guns, called *Battery de Chamba*, serving as outworks to it.

"On *Barradera* side, the fortifications were equally strong, consisting of a fascine battery, called the *Barradera*; and in a small bay at the back of that, another battery of five guns. Facing the entrance of the harbor also, on a

small flat island, stood *Fort St. Joseph*, mounting twenty-one guns. The *Boca* was, in addition, protected by a strong boom, flanked by the broadsides of four large ships of the line, one of which bore the flag of Admiral Don Blas de

#### THE ATTACK BEGINS

The attack opened on March 9, 1741, with a heavy artillery preparation placed on the smaller defenses near the *Boca Chica* forts, *St. Jago*, *St. Philip* and the *Chamba Battery*. Troops (Smollett says Marines) were put ashore on *Tierra Bomba*. *Fort St. Louis* (*Boca Chica Castle*) held out. "About midnight on the 19th, 300 seamen and 200 soldiers or Marines (the latter under Captains Murra and Washington) were landed at a point on the *Barradera* (south) side" and spiked the Spanish guns of the fascine battery. *Boca Chica Castle* (*Fort St. Louis*) was stormed and carried on the 25th of March. The boom was destroyed and the Spanish war-vessels captured or destroyed. The Spanish flagship *Galicia* was taken "with her Captain, the Captain of Marines, and Ensign and sixty men." The enemy deserted the other Spanish defenses including *Manzanilla Battery* and the fortress of *Grande Castillo*. Only the outlying fort of *St. Lazar* was left to attack and take.

#### DISSENSION AND LACK OF COOPERATION

The Land and Water parts of this expedition did not seem to understand each others language. The principles of war are said to be eternal, sacred, everlasting, unchangeable. All were violated at Cartagena that it was possible to violate. Ill-feeling and dissension between the naval and military leaders destroyed all possibility of success.

Vernon allowed Wentworth only 1,500 men with which to capture *St. Lazar*. Wentworth felt this number to be inadequate.

#### WENTWORTH'S COUNCIL OF WAR ASKS FOR AMERICANS

A Council of War held on board the *Princess Carolina* in Cartagena Harbor on March 30, 1741 passed a resolution reading in part as follows:

"And as General Wentworth represented they should want a greater number of men to be landed with them, in order effectually to invest the town; it was resolved, he should be supplied from the Men-of-War with all such of the *American Forces* as he should judge proper to be entrusted on shore."

General Wentworth embodied this demand in a letter written on board the *Dorsetshire* transport on April 2, 1741, in which he asked to be provided with: "All such of the Marines which remain of the 600 on board His Majesty's ships at Spithead, the remainder of Lord James Cavendish's and Col. Bland's Regts and a detachment of 1,500 men under proper officers from the *American Regiment* commanded by Col. Gooch."

## THE TROOPS LAND

The troops began landing early on the morning of April 5th "at a place about two miles from *St. Lazar*." "Two hundred *Americans* as pioneers," were present according to Smollett. Other *Americans* formed part of the combat force. The Convent of *La Popa*, situated on high ground overlooking *St. Lazar*, was occupied. Wentworth bivouaced his men at *La Quinta* on low ground between *La Popa* and the sea.

Admiral Vernon and General Wentworth now indulged in a warfare of words, a heated controversy over the methods and strength to capture *St. Lazar*.

## WENTWORTH WANTS NAVY TO BOMBARD

"At the Headquarters of *La Quinta*," on April 7th a Council of War presided over by General Wentworth took this action:

"The Council of War having taken into consideration the report of Mr. Armstrong, Chief Engineer, and likewise intelligence received from Prisoners, it appears to the said Council of War that the walls of the Castle of *St. Lazar*, cannot be less than 25 feet in height, which is equal to the length of their longest ladders, that there is, besides a ditch with water and very muddy at the bottom, supposed to be about 15 feet in depth. We therefore, for these reasons, deem it impracticable to scale the walls, and do resolve with all possible despatch to raise a battery in order to make a breach.

"The Council of War are further of opinion that if the Castle were at the same time bombarded from the Fleet and a large ship brought to batter it, it might facilitate the success.

"Which Resolution the Council of War desire their president to communicate to Admiral Vernon by the first opportunity." This Resolution was signed by eight officers, six of whom were veteran Marine officers.

## ST. LAZAR ATTACKED APRIL 9TH

"The assaulting detachment consisting of 500 Grenadiers under Colonel Grant and 1,000 Marines, commanded by Colonel Wynward formed up on the beach about 4 o'clock on the morning of April 9th. With them were some Colonial troops from Jamaica, and a detachment of *Americans* carrying scaling ladders, wool-packs, and the hand grenades belonging to the Grenadiers who had been relieved of their pouches on account of the hot climate". Wolfe's Marines, 500 strong, formed the reserve. "Brigadier Guise was in command of the whole." The *Americans* were to follow the attacking columns at some distance in the rear.

## THE AMERICAN MARINES

The attack was a ghastly failure. Among other things the guides proved false. Colonel Grant as he died gasped: "The General ought to hang the guides and the King ought to hang the General."

"The walls were inaccessible, for the Americans had fled, throwing down their scaling ladders and the wool-packs with which the ditch was to have been filled up. Three of them only stuck to their duty, and with a ladder which these brave fellows had dragged up, a few Grenadiers, headed by a Sergeant, actually succeeded in reaching the ramparts of St. Lazar itself."

The actions of the Americans are better described in the Historical Chronicle (July, 1741, from the *Gentleman's Magazine*) in these words: "The Americans, finding they were knocked down without any arms to defend themselves, threw down their ladders, etc., and retired to their camp. Three only were brought up to the trenches, upon which about ten of our Grenadiers and a Sergeant mounted the walls of the fort," etc.

And Tobias Smollett credits the American Marines with bravery as follows:

"Nor could the scaling ladders, wool-packs, or hand-granades, be of any service in this emergency; for the *Americans*, who carried them in the rear, seeing the troops falling by whole platoons, refused to advance with their burdens; but though they would not advance as pioneers, many of them took up the firelocks which they found on the field, and, mixing among the troops, behaved very bravely."

According to Hart, in *Admirals of the Caribbean*, the Americans were "credited by the land-officers to have rendered gallant services."

#### EXPEDITION ABANDONED

"The tropical rains due at this season now set in, sickness increased," and it was decided to abandon the affair. The troops were reembarked on April 15, 1741.

#### OPINIONS OF EXPERTS

Hervey wrote that "the General complained that the Fleet lay idle, while his troops were harassed and diminished by hard duty and distemper. The Admiral affirmed that his ships could not lie near enough to batter the town of Cartagena, and upbraided the General with want of activity and resolution to attack the fort of *St. Lazar*, which commanded the town, and might be taken by scalade."

"Between the Admiral, who seemed suddenly to be morally paralyzed, and the General, who had all the time seemed to think that if he kept his mouth open long enough the cherries would certainly drop into it," said Colomb, "there arose mutual recriminations."

Colonel Field tells us that Vernon had "striven rather to dictate to and interfere with the Military commanders than to support them by a judicious use of his ships," and that while "Wentworth, doubtless, was not free from blame," he "was terribly and hopelessly handicapped by Vernon." Seldom "has a worse fiasco dulled the lustre of the British arms."



In a letter to the writer of this article, dated January 9, 1926, in which he enclosed Wentworth's resolution of April 7th, Colonel Field wrote: "The following resolution of the Council of War assembled by General Wentworth, and which was forwarded to Admiral Vernon, proves beyond controversy that the failure to capture the Castle of *St. Lazar* and the loss of life entailed was entirely the fault of the Naval Commander. He was right in urging the necessity of losing no time in the poisonous atmosphere in which the operations were being carried on, but to have persisted in demanding that *St. Lazar* should be attacked by enfeebled troops without any artillery preparation in the face of the resolution, signed as it was, by officers of long experience in warfare, was absolutely criminal and his demand was further aggravated by his making no attempt to assist the assault by the guns of any of his ships."

Captain Marryatt in one of his stories said that "the Army thought the Navy might have beaten down the stone ramparts ten feet thick and the Navy wondered why the Army did not walk up the same ramparts which were thirty feet perpendicular." Bancroft informs us that the "enterprize, instead of having one good leader had two bad ones." Mahan is quoted as saying that the Admiral and the General quarrelled, as was not uncommon in days when neither had an intelligent comprehension of the other's business.

Lodge summed it up by declaring it a "fruitless expedition" but that it was "one more step in the development of the Union."

Tobias Smollett gave his criticism in *Roderick Random*: "It is a melancholy truth which, however, ought to be told that a low, ridiculous, and pernicious jealousy subsisted between the land and sea officers during this whole expedition; and that the chiefs of those were so weak or wicked as to take all opportunities of thwarting and manifesting their contempt for each other, at a time when the lives of so many brave fellow-subjects were at stake, and when the interest and honor of their country required the utmost zeal and unanimity. Instead of conferring personally, and cooperating with vigor and cordiality, they began to hold separate councils, drew up acrimonious remonstrances, and send irritating messages to each other; and while each of them piqued himself upon doing barely as much as would screen him from the censure of a court-martial, neither seemed displeased at the neglect of his colleague; but, on the contrary, both were in appearance glad of the miscarriage of the expedition, in hope of seeing one another stigmatized with infamy and disgrace."

On other matters Smollett wrote:

"Our provision consisted of putrid salt beef, to which the sailors gave the name of *Irish Horse*; salt pork of New England, which though neither *fish nor flesh*, savored of both;" also "brandy or rum" diluted with water to render it palatable (instead of small beer) "for which reason, this composition was, by the sailors not unaptly styled *Necessity*." Vernon's sobriquet was

*Old Grog* given him on account of his wearing a cloak of GROGRAM. So the men gave this mixture of Jamaica rum and water the nickname of *grog*.

Allen expressed a succinct criticism in these words: "Sickness among the troops, the ill-temper among the land and sea commanders, lost the reward for which they had so long toiled."

#### AMERICAN MARINES LAND AT GUANTANAMO BAY, CUBA

After the Cartagena catastrophe Vernon made an attempt to take Cuba from the Spaniards. Hildreth wrote that five hundred additional Americans were sent from Massachusetts for this mission, but that the effort failed since there was a resentful spirit among the Americans over these operations; for it was felt that "the Colonial troops had been condemned to the hardest drudgery of the service."

Admiral Vernon sailed into *Guantanamo Bay*, Cuba, on July 13, 1741. In that early period this bay bore the name of *Walthenam Bay*. Vernon re-named it *Cumberland Bay*, after the Flagship. It was forty miles to the westward of *St. Jago de Cuba* and was not occupied by Spaniards or defended. Vernon had with him "61 sail in all." The transports carried "3,000 men remaining of the Army and 1,000 Negro troops which had been raised in Jamaica."

"On July 20, 1741, a Council of War decided to begin the reduction of the Island of Cuba" by marching overland to attack *St. Jago*. Once again cooperation failed. General Wentworth on August 5, 1741, wrote to Admiral Vernon "from the Camp in Cuba," in part, as follows:

"As you, Sir, were pleased to assure me that all the *Americans* should be landed when this expedition was taken into consideration," I "fully expected them to join us, our numbers at the present being very low and within these few days a good deal lessened by sickness. If none can be spared from the service of the Fleet, I must acquiesce, but own I did not expect to be disappointed in a matter of so much consequence, as being deprived of a large proportion of the forces I depended upon when we were so far advanced into the Enemy's country."

Operations by land against *St. Jago* proved unsatisfactory, so Vernon proceeded by sea against that port. That also turned hopeless. Then on September 26, 1741, came another blast from General Wentworth. It seems that the Governor of Jamaica had requested "100 private men, with officers in proportion, to be draughted from Col. Gooch's Regt." So the five ranking land officers held a Council of War "in the Camp in the Island of Cuba" and passed this resolution:

"That the Troops here incamped, being reduced so low in their numbers, as not to afford three reliefs for the ordinary and extraordinary guards, the 100 men required cannot be spared until they shall be replaced by the like

number from the Independent Companies at Jamaica and actually landed here at our Camp before the 100 *American* soldiers shall be embarked."

Finally the operations were given up; and the troops reembarked on November 28, 1741, and sailed out of Guantanamo Bay. Attempts were later made upon Porto Cavallo and La Guaira, but neither met with success. "The whole design upon the Spanish possessions in America had come to a bad end due to the incapacity of those in command."

## PROFESSIONAL NOTES

### Care And Feeding Of Native Animals—Animal Equipment

*(Prepared by the Brigade Quartermaster, Nicaragua.)*

Mules have been found most suitable of any animal obtainable in Nicaragua, as they may be used both as riding and pack animals. This is especially true in dry season when corn and forage of any kind is scarce, as they do not require as much food as horses and bulls, and will stand more hard work under all conditions. Care should be used in selection when purchased, accepting only those between the ages of four and ten years. Minimum height should be twelve hands, weight in proportion. For packing purposes, those showing signs of having been used as pack animals, if sound, are more desirable than those not broken to the pack.

The biggest asset in keeping pack animals in service is proper care. Sore backs are the principle injuries that keep a large percentage of pack animals, also saddle animals, on the sick list. A great deal of this is caused by inexperience on the part of those in charge of packing and pack trains. Marines who have had experience and proper instruction in saddling, packing, and in the care of animals have in general done excellent duty. The most important points are: Proper padding for either saddle or pack; proper adjustment of girths, cinches, breast straps, and breeching, (sawbuck saddles); care in making up packs so they will balance, and not overload; and most important the checking up of all packs after about twenty minutes on the trail to see that girths, cinches, and all parts of pack are in place and in adjustment, and at each stop for rest on trail todo the same. If this is conscientiously carried out a small percentage of animals will be on the sick list under ordinary conditions. The average load for pack animals is about one hundred and twenty pounds, with a hundred and thirty-five pound maximum and a hundred and ten pounds under bad conditions.

Sawbuck pack equipment should be well padded. Two or three native straw pads covered with burlap and sewed together at the edges are very serviceable. Two of these pads or one saddle blanket and one straw pad are required to properly pad the animal's back. Two saddle blankets may also be used. Cargo should be taken out of cases to reduce bulk and extra weight. Rolls should be packed in a sling roll, the sling to be eighteen or twenty feet long and of  $\frac{3}{8}$  inch rope doubled. Pass about one-half of the doubled rope over the saddle, form an eye in each rope over the center of the animal's back, pass the eye from the center of the saddle underneath the cross tree, and secure one to the front and one to the rear cross tree, this prevents the pack from slipping. On the right side, tie two eyes in rope about two feet apart and both the same distance from cross tree; with a packer on each side, the rolls are laid over the sling rope and in against the saddle with one hand, and held in place with the other hand. When sufficient cargo has been loaded, the right packer passes the sling rope over the top of the load to the left packer, who in turn passes the front rope through the front eye of the sling rope and pulls



the rope taunt enough to properly secure the load; the same is done with the rear rope, then the load is equally balanced over the center of the animal's back. The cargo cinch with ten foot of one-half or three-eighth inch rope secured to the sling on each end is placed underneath the animal between the front and rear saddle cinch, the right packer passes all the rope over top and center of the load to the left packer, the left packer with the end of his rope passes over and under the right rope at the top and center of the load, The slack is then taken up by the right packer. This being done, both packers with one foot against the load pull together and take up all possible slack, Both packers keeping the rope taunt over the load, the right packer going to the rear and the left packer to the front. Both pass the remainder of their rope underneath between the load and the animal, the right packer bringing his rope up in front and then the left packer bringing his rope up in the rear of the load. The right packer passes the remainder of his rope diagonally over the load to the left packer, the left packer with the end of his rope in one hand passes it over and under the right rope diagonally across the load to the right packer. The left packer with one foot against the rear of his load and the right packer with one foot against the front of his load, pull together, taking up all slack. The right packer then holds his rope taunt and the left packer secures both ropes together in a bow-knot at the top of the load. The cargo cinch is applied in the same manner in securing loads carried in panniers.

The sawbuck pack outfit now in use in the Northern Area has been found most suitable for use on native animals here. It can be used with or without panniers, depending on nature of stores to be packed. Panniers are used only for packing rations.

Only the smallest size issue saddle, No. 11, should be issued for use on native animals.

Mules under ordinary working conditions should have five to six pounds of corn per day in addition to cut forage or pasturage. Horses require about twice this amount of corn in addition to cut forage or pasturage.

A very effective and protective ointment for all open wounds is made of the following: One part creoline, twenty parts sulphur powder, twenty parts of either of the following oils: Salad, olive, sperm, or neatsfoot oil.

Badly bruised or swollen withers and backs should be irrigated frequently with cold water, and if superated should be opened and drained at the lowest possible point.

Fly blows and maggot deposits in or around wounds can be properly destroyed by applying a small portion of pure creoline on the eggs or maggot proper. Care being taken not to allow it to run over other healthy tissue, which it will readily irritate and blister. Properly used, creoline is very effective for this purpose. Also a very useful antiseptic for field use is as follows: One part of creoline and thirty parts water, for general purposes this is a very good antiseptic solution. Chloroform may also be used to destroy maggots on animals.

## New Weapons And Mechanized Combat

Certain portions of the report of Major H. C. Pierce, who acted as observer for the Marine Corps at the recent demonstration before the Army Ordnance Association at Aberdeen proving ground, are reprinted below because of their unusual professional interest.

October 17, 1929.

The first event was the firing of a burst of tracer ammunition from a calibre .30, Browning machine gun, with a view to demonstrating the action of tracers. Following this, fire was conducted from a calibre .50, Model 1921, antiaircraft machine gun. This gun will fire at the rate of 500 rounds per minute, and is capable of penetrating  $\frac{1}{2}$  inch armor-plate at a range of 1000 yards. The action of both weapons is familiar to the Marine Corps.

A late type of antiaircraft weapon, the 37-mm. antiaircraft gun, was then demonstrated. This cannon fires a high explosive projectile, weighing  $1\frac{1}{4}$  pounds, and has a muzzle velocity of 2800 feet per second. It is full automatic in action, and has a rate of fire of from 80 to 90 rounds per minute. The ammunition for this weapon is fitted with a super-sensitive fuse for use against aircraft, which will detonate on contact with as fragile a material as the fabric of the wing of a plane. This gun is similar in action to the Browning machine gun. It is mounted upon a wheeled carrier to be used as a trailer. When it is desired to fire the piece, this platform is lowered. It may be used for both antiaircraft fire and for fire against ground troops. This automatic cannon is intermediate between the 3 inch antiaircraft gun and the .50 calibre machine gun. It is intended for use by the antiaircraft service in certain situations for the protection of troops, bivouacs, camps, trains, etc., against low-flying bombardment and attack aviation. It is conceivable that this cannon might be a suitable weapon for a marine antiaircraft organization, to be used in conjunction with the antiaircraft 3 inch gun and the .50 calibre machine gun, antiaircraft. The matter of defense against aircraft, however, has been the subject of much experimentation since the World War, and is still in process of development.

Firing was then conducted from a 75-mm. gun, Model 1897. From this gun a series of rounds of shrapnel with time fuses set at two-second intervals was fired with the object of showing the trajectory of the shell.

The latest type 37-mm. gun, commonly known as the infantry accompanying gun, which has been practically adopted as standard by the army, was then fired. This weapon has a range of 5000 yards, and will penetrate 1 inch armor-plate at 500 yards. It has a wide traverse and may be transported by hand in four loads. This is a very good anti-tank weapon, a great improvement over the present 37-mm. weapon. In case of a major emergency it is considered that this weapon would replace the present 37-mm. weapon now in use in both the army and the Marine Corps.

The next demonstration was that of the 75-mm. pack howitzer. This piece has already been adopted by the Marine Corps to eventually replace the

75-mm. gun. A number are being purchased by the Navy and four are to be purchased for the Marine Corps during the fiscal year 1931.

Several rounds were then fired from the 75-mm. infantry mortar, smooth bore with fin type projectile. This weapon is designed to replace the 3 inch trench mortar of war time development. This mortar is breech loading, is transported upon wheels and may be broken down with facility into loads for transportation by hand. It is of interest to note that this piece was first designed with a rifled bore. It was found, however, that with a rifled bore, the shell when fired at the correct elevation to attain a range of 400 yards (the minimum range desired), the trajectory was most erratic and it was consequently found necessary to return to the smooth bore type of mortar. While this weapon should eventually replace the present 3 inch trench mortar, it is still in a process of development and should be kept under observation pending its completion in detail.

The latest type of 75-mm. gun, M-1, mounted upon M-1 carriage, was then fired. This piece is mounted upon a carriage fitted with a split-trail, a change from the original, which enables a greater elevation.

A 105-mm. howitzer, a post-war development, which is intended to be the divisional howitzer was then demonstrated. This gun has a range of 12,000 yards and fires a 33 pound projectile. It is of interest to note that this gun was equipped with a "muzzle brake", designed to relieve a certain amount of the stress placed upon the parts during recoil. This device was very similar in appearance on a large scale to the Cutts compensator. This piece is intended in the army to be the companion in the division to the 75-mm. gun.

A demonstration of the employment of a mechanized force in an advance was conducted. The advance guard consisted of a Christie tank and an armored command car. This advance took place across an open field of a more or less rolling terrain. The Christie tank negotiated this terrain at a high rate of speed apparently without difficulty, although it was not a particularly rough piece of ground. The command car was a small car (4 passengers including driver), fitted with bucket seats, and having an armored windshield. The only apparent difference from an ordinary car was the very large size tires. No change was made by the Christie tank from wheels to track or vice versa.

In the second wave were two light tanks of the T1E1 type. These tanks are capable of a speed of 13 miles per hour, are equipped with a one-pounder gun, a calibre .30 machine gun, and have a crew of two men and a weight of 14,500 pounds. It is believed that these tanks are particularly adapted to our needs in landing operations, owing to their small size, which would facilitate their landing from lighters, and to their mobility.

Following the second wave was a third wave of five tanks (6 ton), which are now standard in the army. These tanks have a speed of from 1½ miles to 7 miles per hour. They have a crew of two men and are equipped with a 37-mm. or calibre .30 machine gun.

The next echelon consisted of three tanks, two medium tanks having a weight of 25 tons each and one heavy tank, Mark VIII, having a weight of 44 tons. The medium tank has a crew of 4 men each and is capable of crossing a standard army pontoon bridge. The heavy tank has a speed of from  $1\frac{1}{2}$  to  $5\frac{1}{2}$  miles per hour and carries a crew of one officer and eleven men. It is equipped with two six (6) pounders, and five machine guns.

The fifth wave consisted of two motorized batteries of the Sixth Field Artillery. These batteries are moved to the desired point by truck and thence across country by their own tractors.

An echelon of cross-country cars and cargo carriers then followed bringing infantry intended to hold the position taken by the tanks. In this echelon the infantry were transported in open cargo carriers (track laying vehicles) having practically no protection. Upon arrival at the desired point the infantry were disembarked and deployed. The two cargo carriers were fitted, one on the TIEI chassis and the other on an experimental chassis very similar in appearance. The cross-country cars were mounted on commercial chassis, and equipped with extra large tires.

The last echelon consisted of 75-mm. guns moved on self-propelled track-laying mounts. This echelon was also accompanied by a 4.2 inch chemical warfare mortar, which laid down a smoke screen on the enemy position.

Upon completion of the airplane activities antiaircraft fire was conducted against a towed sleeve. This fire was conducted by 3 inch antiaircraft guns, .50 calibre machine guns, and .30 calibre machine guns. The fire control of the 3 inch antiaircraft guns is maintained by means of an instrument called the "director". This instrument is very complicated, but it automatically and continuously observes the target, computes its future position in space and transmits the data to the guns by electrical impulse. The gunners have only to watch pointers on two concentric dials in order to keep the gun on the target.

The night demonstration consisted of a display of flares and signals dropped by planes, followed by night firing at a towed sleeve. The firing was similar to that held in the afternoon except that searchlights were employed to illuminate the target. Three beams were placed upon the sleeve and maintained there during the passage of the target.

### Marine Corps Rifle And Pistol Team

The Marine Corps Rifle and Pistol Team participated in twenty-one rifle and pistol matches in the United Services of New England Matches at Wakefield, Mass., during the period August 10 to 18, 1929, and won fourteen as follows:



THE ELDRIDGE MATCH  
 THE CUMMINGS MATCH  
 THE POWELL MATCH  
 THE WOODMAN MATCH  
 THE PHELAN MATCH  
 THE NEIDNER MATCH  
 THE EDWARDS MATCH  
 THE HAYDEN-ALL-AMERICAN  
 MATCH

THE MARINE CORPS LONG  
 RANGE MATCH  
 THE SERGEANTS' MATCH  
 THE WOOD MATCH  
 THE WALTER M. PRATT  
 PISTOL MATCH  
 THE ARTILLERY PISTOL  
 TEAM MATCH  
 THE COAST ARTILLERY MATCH

In the National Rifle Association Rifle and Pistol events that followed at Camp Perry, Ohio, the team won eight out of twenty-nine matches in which they participated, as follows:

LEECH CUP MATCH  
 UNITED SERVICE MATCH  
 CHAMPIONSHIP REGIMENTAL  
 TEAM  
 RAPID FIRE PISTOL MATCH

HERRICK TROPHY TEAM MATCH  
 NRA FREE RIFLE MATCH  
 NRA 1000-YDS. 2-MAN TEAM  
 MATCH  
 INDIVIDUAL PALMA MATCH

In the National Matches the team won the National Pistol Team Match, but took only third place in the Nation Rifle Team Match, with the Infantry first and the Engineers second.

For the first time in two to three years the Marine Corps is able now to get back into the important routine business of target practice. The expeditions to Nicaragua and to China in 1927 were of such a nature as to demand a partial cessation in rifle marksmanship. This has now been resumed even in Nicaragua, where there are now four rifle ranges. In addition, the forces in both China and Nicaragua have been reduced, permitting elsewhere a renewal of routine peace time activities under the more favorable home surroundings. Much assistance is expected for the development of new material for next year's Marine Corps Rifle and Pistol Team Squad from the rifle ranges at Parris Island and San Diego, where the climate permits of firing during the winter. Conscientious attention to instruction prior to going on the range and to instruction practice preliminary to record practice should have a favorable bearing on the standard of marksmanship in the Marine Corps in the coming years.

#### **Dover Marines Shoot Well In Roxbury Matches**

Under the captaincy of First Lieutenant James Ackerman, a rifle team, the membership of which was made up of marines on duty at the Marine Barracks, Dover, N. J., competed in a series of three matches with civilian clubs in the vicinity of that post on the Roxbury Rifle and Pistol Club rifle range near Dover, New Jersey, during the months of September of 15 rounds of slow fire, 5 prone, 5 sitting and 5 standing, and 5 rounds rapid-fire standing to prone. The marines were outpointed in the first two matches but captured the final event and took first three places for individual honors.

#### **Legation Marines At Peking Vs. Army Forces In China**

For the fifth consecutive year a rifle team representing the Marine

Detachment, American Legation, Peking, China, defeated the 15th Infantry Regiment Rifle Team in their annual inter-service match held on the International Rifle Range, Peking, China. The marines score 5223 as against 5148 for the infantrymen. The course consisted of twice over the regular qualification course, the Infantry Team using two National Team shots and the marines none.

The infantry proved to be better pistol shots and captured the pistol team event with a score of 2409 as against 2342 for the marines.

Preceding these competitions two rifle teams from the Marine Detachment defeated two teams from the British Legation Guard, firing under British rules.

### **Material In The Historical Section U. S. Marine Corps**

**F**OR the information of the members of the Marine Corps Association and readers of THE MARINE CORPS GAZETTE, there is being published in this issue of the GAZETTE a list of material, including books, which has been gathered together in the Historical Section, Headquarters, U. S. Marine Corps.

All of the material deals directly or indirectly with the history of the Marine Corps from its organization in November, 1775, to the present period. While it is impracticable, through lack of space, to give detailed descriptions of the material, the following outline, with brief descriptions in some instances, is submitted:

#### **Chronological Files and Archives**

This classification includes extensive files of historical matter (general in nature, and arranged chronologically) consisting of typewritten copies of original letters, manuscripts, official papers including many State Papers; also copies and extracts from various histories, historical works, treatises, publications, etcetera. The material in this group covers the Marine Corps and its activities from the period of the American Revolution to and including the World War. It is available for ready reference and is preserved in steel file cases.

A subdivision of the above (labeled "Archives"), contains material selected from the main chronological files, under separate arrangement, which facilitates the work of locating information desired on particular subjects.

#### **Letters Received**

Twenty-six volumes of letters bound by years, from 1798 to 1817 inclusive. Each letter is linen-backed and each volume bound in heavy canvas with printed facings.

Letters received from 1817 to 1903, not yet bound, but carefully arranged in their order. These archives include only important letters.

#### **Letters Sent**

These are copies of letters, in handwriting, in large books. They are

the original books. The earlier volumes are kept in the Historical Section, while the later ones are kept in the Old Files Section at Headquarters. The Letter Book for the period between June 30, 1801, and March 20, 1804, is missing. Further efforts should be made to locate this "Lost Volume."

#### Early Marine Corps Orders

Two books, covering the period from August 22, 1803, to October 14, 1822. The earlier period from 1798 to 1803 is missing. Volumes later than 1822 are in Old Files Section.

#### World War

Operations reports of the Fourth Brigade of Marines, including originals and copies of originals prepared in France at the time. These reports are in fifteen binders covering the period August 5, 1918, to December 20, 1918. Copies of operations reports of the Fourth Brigade, for the other periods, are arranged in separate form in bound volumes and folders.

Maps, including original war maps and sketches of the Fourth Brigade and other organizations of the Marine Corps while in France, carefully arranged as to major and minor operations.

Miscellaneous records relating to the Second Division, Fourth Brigade, Fifth and Sixth Regiments, Sixth Machine Gun Battalion, and their units. In this vast group are orders of all kinds, reports, memorandums, dispatches, summaries of intelligence, rosters, casualty lists, citations, training schedules and other papers which have been classified and arranged in folders with proper designation. Similar miscellaneous files of the Fifth Brigade, 11th and 13th Regiments and their units, as well as aviation units and other Marine Corps organizations in France are likewise arranged and maintained.

#### Pictures

The Historical Section has acquired many photographs of prints and drawings relating to the Marine Corps and its history. While the collection is not large, it contains a number of pictures of particular interest. More pictures are desired, especially the "unusual" ones relating to the Corps, including the Marine Band, in the earlier periods.

#### Books

The Historical Section has also built up a library consisting of a valuable collection of books, pamphlets, and official publications, most of which deal directly with the Marine Corps and its history. They are arranged and maintained in oak cases, in 12 sections, and a list of the more important ones is as follows:

*Historical Works* (including certain reports of historical value).

Navy of the American Revolution, Paullin.

History of the Navy of the United States, Cooper (2 vols.).

History of the U. S. Marine Corps. Collum (1st & 2d Eds.).

The United States Marine Corps in the World War.\* McClellan.

The War with Mexico. Smith (vols. 1 & 2).

Our Navy and the Barbary Corsairs. Allen.

- History of the Royal Marine Forces, 1664-1701. Edye (Vol. 1).  
Naval Actions and History, 1799-1898. Hist. Soc. of Mass.  
The Great Events of the Great War. Edited by C. F. Horne. (7 vols.).  
The Story of the Marines, 1740-1919. Leonard and Chitty.  
History of the World War; Literary Digest, in 7 volumes.  
American Naval War with France. Allen.  
Notes on the Spanish-American War. Office of Naval Intell.  
The War with Germany. Ayres.  
On the Campaigns of 1918. Johnston.  
"Simsadus London". Leighton.  
History of the American Nation. McLaughlin.  
Records of the Second Division including 3d & 4th Brigades Marines.  
Second Div. Hist. Assoc. (8 vols.).  
The Navy and the Nation. Daniels.  
The A. E. F. Skillman.  
Final Report of General John J. Pershing, C. in C., A.E.F.  
Operations of the 29th Division, A.E.F., October, 1918. Bowen.  
History of the 90th Division, A.E.F. Wythe.  
The American Army in the European Conflict. DeChambrun & De-Marenches.  
The Story of the Rainbow Division, A.E.F. Tompkins.  
\*Note: The Historical Section has an ample supply of "The United States Marine Corps in the World War," for distribution.  
Annual Reports of Commandant, U. S. Marine Corps, 1893-1906 (in 1 vol.).  
America's Part. Reilly.  
Occupied Haiti. Balch.  
A Diary of the Russo-Jap. War (1 part, with maps and illustrations)  
Office of the "Japan Chronicle," 1908.  
History of the U. S. Marine Corps (mimeographed chapter III to XXV, inc. indexed and annotated), by Major E. N. McClellan, U.S.M.C.\*  
*Books, Miscellaneous* (including booklets, pamphlets, reports, hearings, etc. in binders, paper and boards).  
American Constitutions—vols. I and II.  
Laws Relating to the Navy, Navy Department and Marine Corps—1865.  
Navy Register of the U. S., 1847.  
Navy Register of the U. S., 1924-1929, inc., (6 vols.).  
Engineer Field Notes. Chief Engineer, A.E.F.  
Republicana Dominicana Collection of Executive Orders. Nos. 117-380, incl.; Administrative Regulations 1 to 13 incl.  
Civil Report of Brig. Genl. Leonard Wood, Military Governor of Cuba. (vols. I to IX, incl.).  
Republic of Cuba—Report of Prov. Administration by Chas. E. Magoon, Provisional Governor, 1906-1908.  
Society of the Sons of the Revolution. Dist. of Columbia, 1920.  
Pennsylvania Society of the Sons of the Revolution.  
Movements of Vessels—July 1, 1911, to June 30, 1915, incl.  
Hearings before Select Committee of Inquiry into Operation of U. S. Air Service—House of Rep. Parts 3, 4, 5, and 6.  
Hearings before Select Committee on Haiti and Santo Domingo before the U. S. Senate, vols. I and II.

\*Note: Many sets, and odd chapters, of the early history of the Marine Corps, by Major McClellan, have been furnished to libraries and others interested in the history. There are still available for free distribution a limited number of Chapters III to IX, inclusive; XI to XV, inclusive; XVIII and XIX. The supply of all other chapters is exhausted; file copies being retained by the Historical Section.



- Army and Navy Chronicle—1839.  
"Records of Living Officers of the U. S. Navy" (1902). Hamersly.  
"General Register of the U. S. Navy and Marine Corps for One Hundred Years." (1882). Hamersly.  
The U. S. Navy in the World War—Official Pictures. Russell & Moore.  
"I Was There" with the Yanks in France, with sketches. Baldrige.  
History of Buffalo and Erie County in the World War, 1914-1919. Sweeney.  
Virginians of Distinguished Service in the World War. Davis.  
War activities of Scott County, Iowa. Cram.  
The Battle of Eastleigh, N.S.N.A.F.  
Epitome of Upton's Military Policy of the U. S. (1916).  
American Decorations, 1862-1926.  
Citations in the Second Division, General Orders, A.E.F.  
Citation Orders—G.H.Q., A.E.F.  
Navy Year Book, 1919. Schmidt.  
Navy Year Book, 1920-21. Silsby.  
Reports of the Secretary of the Navy, 1857-1928 (including Marine Corp Reports of the War Department, 1898 to 1909 inclusive).  
Reports of the War Department, 1898 to 1902 inclusive.  
Annual Reports of the War Department 1903-1909, inc., also 1919-1921 inc.  
Report of the Chief of Bureau of Insular Affairs, 1903-1908, inc., and 1911-1920, inc.  
Navy Regulations—1876.  
General Orders and Circulars, Navy Department, 1863-1887, inc.  
Navy and Marine Corps Register, 1916-1918, inc., also 1917-18 (2 vols.).  
Navy Directory, 1913-1915, inc., and 1918-1921 inc. (7 vols.)  
Military Operations and Maritime Preponderance. Callwell.  
Log of the Leathernecks aboard the U. S. S. GEORGIA, 1917-1918. Smith.  
American Historical Review, 1922-1929.  
Field Orders, Second Army Corps, A.E.F.  
Field Orders (1918) Fifth Division, A.E.F.  
Military Government of Porto Rico, Oct. 18, 1918, to April 30, 1920; Appendices to Report of Military Governor.  
Acts and Resolution Relating to the Navy and Marine Corps, 1922-23.  
Naval War Records—Series I, vols. 2, 3 and 4.  
Official Records of the Union and Confederate Navies in the War of the Rebellion, series I and II, 29 volumes, including index vol. and separate compilation of Civil War maps.  
American Ship Types. Hardy.  
Map Atlas—for Records, Second Division (Regular) 1918-1919. Compiled by Second Division Historical Association. This is a very complete set of war maps (copies) in France, in one large book, 3 ft., 2 in. wide x 4 ft. long, mounted in special stand.  
Navy and Marine Corps Directories, 1918, (in 5 vols.).  
The Doctrine of Intervention. Hodges.  
Military Diary—U. S. Forces in Nicaragua, 1912-1913.  
Journal of Marine Battalion at Guantanamo Bay, Cuba, 1898.  
Marine Corps Orders, 1885-1900.  
Orders and Letters, Marine Barracks, Philadelphia, Pa., 1825-1829.  
Letter Books, Marine Barracks, Philadelphia, Pa., 1859-1864, inc., 2 vols.

- Records, Reports and Papers of U. S. Naval Forces, London. (1 group, not bound).
- Scrap Book, containing matter relative to the Marines at Alexandria, Egypt, year 1882.
- Uniforms of the Marine Corps, 1859 (2 copies).
- Copy book of Marine Guard of U. S. S. *Guerriere*, 1867-1869; also orders.
- Scrap Book, containing comments of the press re withdrawal of Marines from ships of the Navy, year 1908.
- Letter Book (Q. M. Office, Washington, D. C.), 1813-1814.
- Reports of Sergeant of Guard, M. B., Washington, D. C., Dec. 1864-April, 1865.
- Report Book—Officer of the Day's—M. B., Washington, D. C., October 3, 1903 to Dec. 31, 1804.
- Book, contg. reports of Marine Guards of various ships commanded by Captain John Hall, U.S.M.C., in the year 1802.
- Report Book, Orderly Sergeant's, M. B., Charlestown, Mass., 1815.
- Book, contg. General Orders of Gendarmerie d'Haiti, 1917-1922, incl.
- Book,—Appointments and Promotions of Noncommissioned Officers, 1879-1899.
- Scrap Book,—press clippings, etc. re Marines in Spanish War, 1898.
- Scrap Book,—press clippings, etc., re Marine Corps, 1880-1895, incl.
- Book, showing discharges (Marine Corps), 1827-1829.
- Book,—Guard Reports, M. B., Charleston, S. C., 1817.
- Register of Commissioned Officers, Marine Corps, 1816-1848, incl.
- Report of M. Louis Borno, President of Haiti, 1918 (6 copies).
- War Diary, First Marine Detachment, Naval Base, Azores, Mar.-Nov., 1918.
- War Diary, First Marine Aeronautic Co., Ponto Delgado, Azores, 1918-1919.
- Expeditions formed and landings effected by U. S. Naval Forces, in Central America, Mexico and West Indies, from 1901 to May, 1929; compiled by Lieut. Colonel R. B. Farquharson, U. S. M. C.
- Service Publications*; (many of these are bound in durable canvas with printed facings).
- THE MARINE CORPS GAZETTE—file copies, March, 1916, to present time.
- The Leatherneck, 1917-1924, incl., bound; file copies from 1924 to the present time.
- Marines' Magazine, 1916-1921, incl., bound.
- Recruiters Bulletin, 1914-1921, incl., bound.
- U. S. Marine Corps Builder, 1921-1922, bound.
- Guam News Letter, 1918-1922, incl., bound.
- The Guam Recorder, Mar., 1924, to Jan., 1925, incl. bound, 1926, to present time, file copies.
- Pearl Harbor Weekly, 1921-1924, incl., bound; file copies for 1925 to 1927.
- The Star (San Domingo), 1924, bound.
- Gendarmerie News, 1923-24, bound.
- Fourth Regiment News (San Domingo), 1920-1922, incl., bd
- Fifteenth Regiment News Letter, 1921-1923, bd.
- Third Regiment Globe and Anchor, 1921-1922, bd.
- The Brigadier (Haiti) 1921-1924, incl., bd.

"Walla Walla," (Shanghai) 1928-1929; file copies (several missing numbers).  
 "O' Le Fa'atonn" (Samoa) 1915-1922, incl., bd.  
 The Marine (Parris Island) 1919, bd.  
 Parris Island News, 1926, file copies.  
 The Legation Guard News (Peking) 1922-1923, bd. File copies of issues 1924 to present time; several missing numbers.  
 The Brigade News (Nicaragua); file copies, Nov., 1928, to present time.  
 "Le Moniteur" (Haiti) 1910-1922, incl., bd.  
 The Peep-Sight, 1920-1923, incl., bd.  
 The Barrage (Nav. Sta., New Orleans, La.), 1924, bd.  
 The Departmental Bulletin (Gendarmerie), 1921, bd.  
 U. S. Naval Institute Proceedings; 1922-1929, incl., file copies.  
 "Marine Publications in France," 1919, contg. issues of "The A.E.F.," "The Devil Dog," "Globe & Anchor," "Guard Gazette."  
 "Qu' Est—CE Que C'Est," 1919, volume 1, bd.  
 The Trail, (Second Division), 1921, bd.  
 The Amoroc News, 1919, bd.  
 The Stars and Stripes, 1918-1919, bd.  
 The Schleswig Patrol, vol. I, 1919, bd.  
 The Citadel Observer, 1924, bd.  
 The Globe and Anchor, 1918-1919, bd.  
 "S O L," (11th Regt.) France, 1919, bd.  
 The Pontanezan Duckboard; 1919, bound.  
 The Globe and Laurel (The Journal of the Royal Marines), file copies from 1925 to the present time.

In addition to the above there is on file in the Historical Section one or more copies of other papers and publications, containing articles and matter of historical interest.

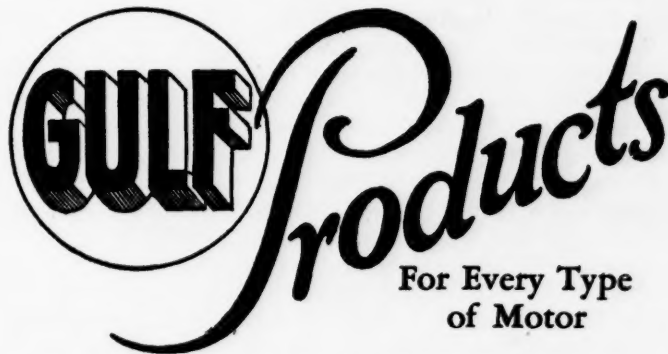
Card indexes of many of the above-named service publications have been prepared.

### Relics

Hanging on one of the walls of the Historical Section is an old sword, that of Colonel Jacob Zeilin, U. S. M. C., Commandant of the Marine Corps during the Civil War. Additional interest is attached to this sword, in that it is not of the Mameluke type, it being of straight type used by the Marine Corps from 1859 until about the year 1875, when the Mameluke was again adopted as the sword of the Marine Corps.

On another wall of the Section hangs two pictures, framed, of the old U. S. S. *Sabine*, one of them with pictures of the ship's crew, including Marines. In other parts of the room are still other pictures, including one, drawn from an old description of Fort Charles, site of Marine Barracks, Parris Island, S. C.

In a standard, in one corner of the room, is the United States Flag. This particular flag, however, happens to be a very rare one—that was planted at Hilton Head, South Carolina by the U. S. Marines, in November, 1861. This flag has only thirty-three stars and is in a fair state of preservation.



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